

**REMOVAL PROGRAM SITE ASSESSMENT REPORT
FOR
SAUGET/EAST ST. LOUIS RESIDENTIAL PCB/DIOXIN SAMPLING SITE
SAUGET AND EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS**

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Prepared by:

WESTON SOLUTIONS, INC.
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Reviewed and Approved by:



Date: 3/24/2010
Ben Maradkel
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LIST OF ABBREVIATIONS AND ACRONYMS

bgs	Below ground surface
CAS	Columbia Analytical Services
CFR	<i>Code of Federal Regulations</i>
CSM	Conceptual site model
EPC	Exposure point concentration
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OSC	On-Scene Coordinator
PCB	Polychlorinated biphenyl
ppm	Part per million
ppt	Part per trillion
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
Solutia	Solutia WG Krumrich
START	Superfund Technical Assessment and Response Team
TCDD	Tetrachlorodibenzo-p-dioxin
TDD	Technical Direction Document
TEQ	Toxic equivalent
TSCA	Toxic Substances Control Act
U.S. EPA	U.S. Environmental Protection Agency
WESTON	Weston Solutions, Inc.
WHO	World Health Organization

1. INTRODUCTION

The U.S. Environmental Protection Agency (U.S. EPA) tasked the Weston Solutions, Inc. (WESTON[®]), Superfund Technical Assessment and Response Team (START) to assist U.S. EPA On-Scene Coordinator (OSC) Kevin Turner in performing a site assessment at the Sauget/East St. Louis Residential Polychlorinated Biphenyl (PCB)/Dioxin Sampling site located in Sauget and East St. Louis, St. Clair County, Illinois (the Site) (Figure 1-1). Under Technical Direction Document (TDD) No. S05-0008-0910-032, U.S. EPA requested that WESTON START document current site conditions; collect soil samples; obtain photographic documentation; and evaluate the potential for imminent and substantial threats to human health, human welfare, and the environment posed by Site-related conditions. From November 4 through 6, 2009, WESTON START conducted a site assessment under the direction of OSC Turner. In addition, U.S. EPA Resource Conservation and Recovery Act (RCRA) Project Manager Ken Bardo was present during the site assessment.

This site assessment report is organized into the following sections:

- **Introduction** – Provides a brief description of the objective and scope of site assessment activities;
- **Site Background** – Details the Site description and its known history;
- **Site Assessment Activities** – Discusses site assessment observations, methods, activities, and procedures used;
- **Analytical Results** – Discusses analytical results for samples collected during the site assessment;
- **Threats to Human Health and the Environment** – Identifies Site-related conditions that may warrant a removal action under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP); and
- **Conclusions and Recommendations** – Summarizes the site assessment findings and recommendations for further Site activities.

2. SITE BACKGROUND

This section discusses the Site description and history.

2.1 SITE DESCRIPTION

The Site consists of residential properties in the Village of Sauget and the western part of the City of East St. Louis, St. Clair County, Illinois (Figure 2-1). The Mississippi River is located approximately ¾ mile west of the Site (Figure 1-1). The meridian coordinates for the Site are latitude 38° 35' 48.88" North and longitude 90° 10' 13.86" West.

2.2 SITE HISTORY

As part of its ongoing oversight of cleanup activities in the Sauget/East St. Louis area, the U.S. EPA Region 5 recently became aware of a 1975 contamination study for residential areas in northern part of the Village of Sauget and the southern part of the City of East St. Louis. During this study, 15 surface soil samples were collected and analyzed for PCBs. The PCB results for six of the samples exceeded 1 part per million (ppm), the general Toxic Substances Control Act (TSCA) generic soil cleanup standard for residential areas. The 1976 report noted that the distribution of PCBs appeared to be higher near the Monsanto plant site

From the 1930s to 1977, Monsanto produced PCBs and a waste incinerator operated from 1971 to 1977 in the central portion of the facility property. The facility (now owned by Solutia) is currently being cleaned up under an EPA Order. Other potential sources of PCB contamination also exist in the area, including other area industries. The Sauget Area One and Sauget Area Two Superfund Sites are also located nearby. Parts of these Sites have already been cleaned up under EPA Orders and other parts are currently undergoing further investigation by potentially responsible parties under oversight by EPA. Dioxins and furans are combustion products of PCBs; therefore these chemicals may also be present in the area from a variety of sources.

3. SITE ASSESSMENT ACTIVITIES

From November 4 through 6, 2009, U.S. EPA OSC Turner, U.S. EPA RCRA Project Manager Bardo, and WESTON START personnel mobilized to the Site to conduct a site assessment.

The objective of this site assessment was to determine if further action was required for PCB and

dioxin/furan contamination in residential soils.

The site reconnaissance and observations and sampling activities are discussed below.

3.1 SITE RECONNAISSANCE AND OBSERVATIONS

U.S. EPA and WESTON START conducted a site reconnaissance at each residential property to be sampled (see Section 3.2 for a list of the properties sampled). Based on visual observations, biased sampling locations were identified. In order to document Site conditions, WESTON START collected written and photographic documentation (see Appendix A). No air monitoring was conducted because of the nature of the constituents of concern.

U.S. EPA and WESTON START observations during the site reconnaissance are summarized below for selected residential properties.

- **Non-Responsive** East St. Louis, Illinois: The east side of the residential property was sampled because of an observed septic field, former garage area, and coal disposal area south portion the residence.
- **Non-Responsive** East St. Louis, Illinois: The east and south sides of the residential property were sampled because of an observed barbecue pit north of the residence.
- **Non-Responsive** East St. Louis, Illinois: The west side of the residential property was sampled because of an observed old septic tank and cesspool and former garage area south of the residence.
- **Non-Responsive** East St. Louis, Illinois: Sample locations were selected from the north side of the residence due to an observed trash burn barrel and filled in old cesspool area on the south side of the residence.
- **Non-Responsive** East St. Louis, Illinois: Sample locations were selected from the north side of the residence due to the backyard being disturbed around an old septic system and a sanitary line being exposed.
- Rush City Playground, East St. Louis, Illinois: Originally, the Route 3 Liquor and Lottery property at 2400 Mississippi Avenue in East St. Louis was planned for sampling (Figure 2-1). However, because of asphalt and concrete surface cover over the entire property, the Rush City Playground was selected as an alternative sampling location.
- All composite samples were located in areas where native undisturbed soils were present, with the exception of **Non-Responsive**. Based on an old aerial photo, the sample taken in the backyard may have been from an area of fill where a former garage once stood.

3.2 SAMPLING ACTIVITIES

As directed by OSC Turner, WESTON START sampled soil in two residential areas in East St. Louis and Sauget, Illinois. Figure 2-1 shows a map of the residential properties sampled. Figures 3-1a and 3-1b show the sampling locations in East St. Louis and Sauget, Illinois, respectively.

The following residential properties in East St. Louis, Illinois were sampled (Figure 3-1a):

- Non-Responsive
 -
 -
 -
 -
 -
 -
 -
 -

- Non-Responsive
 -
 -
 -
 -
 -
 -
 -
 -
 -

The following residential properties in Sauget, Illinois were sampled (Figure 3-1b):

- # Non-Responsive

- # Non-Responsive

One composite surface soil sample from 0 to 6 inches below ground surface (bgs) was collected from each residential/commercial property listed above except at Sauget Field, where three composite soil samples were collected. In total, 34 composite soil samples (plus two field duplicates) were collected. All composite samples were collected from areas where native undisturbed soils were present. Five grab samples were collected for each composite sample. Grab sampling locations

depended on the property layout. U.S. EPA and WESTON START devised a sampling scheme at each property based on the layout and available unpaved space. Any information received by property owners was also used to determine sampling locations. For Sauget Field, the park was divided into three distinct sampling areas. WESTON START donned fresh sampling gloves at each sampling location. Grab soil samples were collected using a disposable plastic scoop, decontaminated stainless-steel trowel, or bucket auger. The five grab soil samples were placed in a disposable foil pan and homogenized. The appropriate laboratory-supplied sample containers were filled directly from the foil pan containing the homogenized soil. Each sample then was labeled and immediately placed on ice.

All soil samples were analyzed for PCB homologs (monochlorobiphenyl through decachlorobiphenyl homologs) and dioxins/furans (from the World Health Organization [WHO] list). Only 12 (plus one field duplicate sample) of the 34 samples collected were analyzed for WHO PCB congeners. All PCB homolog samples were shipped to Columbia Analytical Services (CAS) in Rochester, New York, for analysis, and all dioxin/furan and PCB congener samples were shipped to CAS in Houston, Texas, for analysis. All samples were shipped under chain of custody.

4. ANALYTICAL RESULTS AND CONCEPTUAL SITE MODEL

As discussed in Section 3.2, a total of 34 samples (plus two field duplicate samples) were collected from the Site and analyzed for PCB homologs and dioxins/furans. In addition, of the 34 samples collected, 12 (plus one field duplicate sample) were analyzed for WHO PCB congeners. Figures 4-1a through 4-1h show the five-point sampling locations at each property.

The U.S. EPA developed a conceptual site model (CSM) for the Site that included a decision tree for making decisions regarding actions to be taken at the Site. U.S. EPA decided that if a five -point composite sample could be collected from an unpaved lot of less than 0.5 acre, then the composite sample would be considered representative of that lot or property and further sampling would not be required. In addition, an exposure point concentration (EPC) would not need to be calculated for that property because the composite sample concentration would be considered the EPC.

Each residential property sampled was less than 0.5 acre in size except for Sauget Field and the Rush City Playground. Additionally, the resident at **Non-Responsive** owned three properties – the property at **Non-Responsive** and the properties bordering the **Non-Responsive** properties to the north and east. If these three properties are combined into one property, then the resulting area is greater than 0.5 acre. Based on the CSM, EPCs (the composite sample result for each property less than 0.5 acre) were compared to the following screening levels for the Site:

- Total PCBs: TSCA generic residential soil screening level of 1 ppm
- Dioxin/furans: Two sets of screening levels (see below)
 - According to the U.S. EPA National Dioxin Workgroup, the current screening level for residential soils for dioxins/furans is 1,000 parts per trillion (ppt) total toxic equivalent to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)(TEQ). The dioxin/furan TEQ and the PCB congener TEQ were added together for comparison to the screening criterion of 1,000 ppt total TEQ.
 - In addition, the U.S. EPA is considering changes to the PRG for dioxin, should this happen, data may be re-evaluated as appropriate.

Properties (with composite samples representing less than 0.5 acre) whose sampling results exceeded these screening levels were considered to possibly warrant cleanup.

For composite samples that represent a property of 0.5 acre or larger, the results still were compared to the screening levels listed above. If the results exceeded these screening levels, then additional sampling is considered warranted to determine the true EPC for comparison to the screening levels. Also, if results were significant but did not exceed screening levels, additional sampling may be warranted to determine if the true EPC derived for an area exceeding 0.5 acre is above or below the screening levels.

Tables 4-1a and 4-1b summarize the dioxin/furan and PCB congener results and the PCB homolog results, respectively. Appendix B provides the laboratory analytical reports and the data validation reports for these samples.

None of the composite sample results exceeded the current dioxin/furan screening level of 1,000 ppt total TEQ (Table 4-1a).

The results for properties yielding samples whose results exceeded the total PCB screening criteria are summarized below (Table 4-1b). Figures 4-2a and 4-2b show the sampling locations whose results exceeded screening criteria.

- **Non-Responsive** East St. Louis, IL (SE-SS-04-110409): Total PCB concentration 4.4 ppm
- **Non-Responsive** East St. Louis, IL (SE-SS-15-110509): Total PCB concentration 1.6 ppm
- Sauget Field, Sauget, IL (SE-SS-17-110509): Total PCB concentration 1.1 ppm; results for other two composite samples from Sauget Field (SE-SS-18-110509 and SE-SS-34-110609) less than 1 ppm
- **Non-Responsive** Sauget, IL (SE-SS-21-110509): Total PCB concentration 1.36 ppm
- **Non-Responsive** Sauget, IL (SE-SS-31-110609): Total PCB concentration 1.99 ppm
- **Non-Responsive** [REDACTED], Sauget, IL (SE-SS-32-110609): Total PCB concentration 1.01 ppm

5. THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

Factors to be considered in determining the appropriateness of a potential removal action at a Site are delineated in the NCP at Title 40 of the *Code of Federal Regulations* (CFR) 300.415(b)(2). A summary of the factors applicable to this Site is presented below.

- **Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances, pollutants, or contaminants**

Surface composite soil samples were collected at residential properties and two parks in Sauget and East St. Louis, Illinois, in the vicinity of the Solutia facility. Of the 32 properties sampled, sampling results for six exceeded the screening level of 1 ppm total PCBs, the U.S. EPA TSCA generic cleanup level for residential soils, by 1 to 3 ppm. In addition, the result for one composite sample collected from Sauget Field exceeded the PCB screening level by 0.1 ppm.

Human populations, pets, and other animals could be exposed to PCBs in surface soil through direct contact, inhalation, and ingestion. PCB health effects include acne-like skin conditions in adults and neurobehavioral and immunological changes in children. PCBs are known to cause cancer in animals, and some studies of workers indicate that PCBs could be associated with certain kinds of cancer in humans.

- **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate**

All composite samples collected were of surface soils from 0 to 6 inches bgs. Because the contaminants were detected in surface soil, there is a high likelihood that these contaminants could migrate. Migration could occur through the weather conditions discussed below.

- **Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be released**

Because the PCBs and dioxins/furans were detected in surface soils, there is a high likelihood that these compounds could migrate through wind or rain. Dusty conditions and high winds could cause PCB-contaminated soil to migrate to nearby properties and could increase the likelihood of inhalation of contaminants. In addition, heavy rains could cause the soil to migrate to nearby properties and into stormwater paths or retention areas.

6. CONCLUSIONS AND RECOMMENDATIONS

The following sections provide conclusions and recommendations based on the site assessment findings.

6.1 CONCLUSIONS

During the site assessment, WESTON START collected a total of 34 composite soil samples (plus two field duplicates) from 30 residential properties and two parks to determine if the Site poses imminent and substantial threats to human health, human welfare, or the environment from the presence of potentially hazardous materials at the Site. Based on the CSM developed for the Site, U.S. EPA should evaluate whether the following properties may require a removal action because sampling results are considered representative of the areas sampled and because sampling results indicated that soil at these properties exceeds the preliminary remediation goal (PRG) for PCBs in residential soil by 1 to 3 ppm:

- Non-Responsive
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- **Non-Responsive** Sauget, IL
- Sauget Field, Sauget, IL

None of the composite sample results exceeded the current dioxin PRG for residential use properties of 1,000 ppt total TEQ. However, the U.S. EPA National Dioxin Workgroup is considering changes to the PRG for dioxin, should this happen, data may be re-evaluated as appropriate.

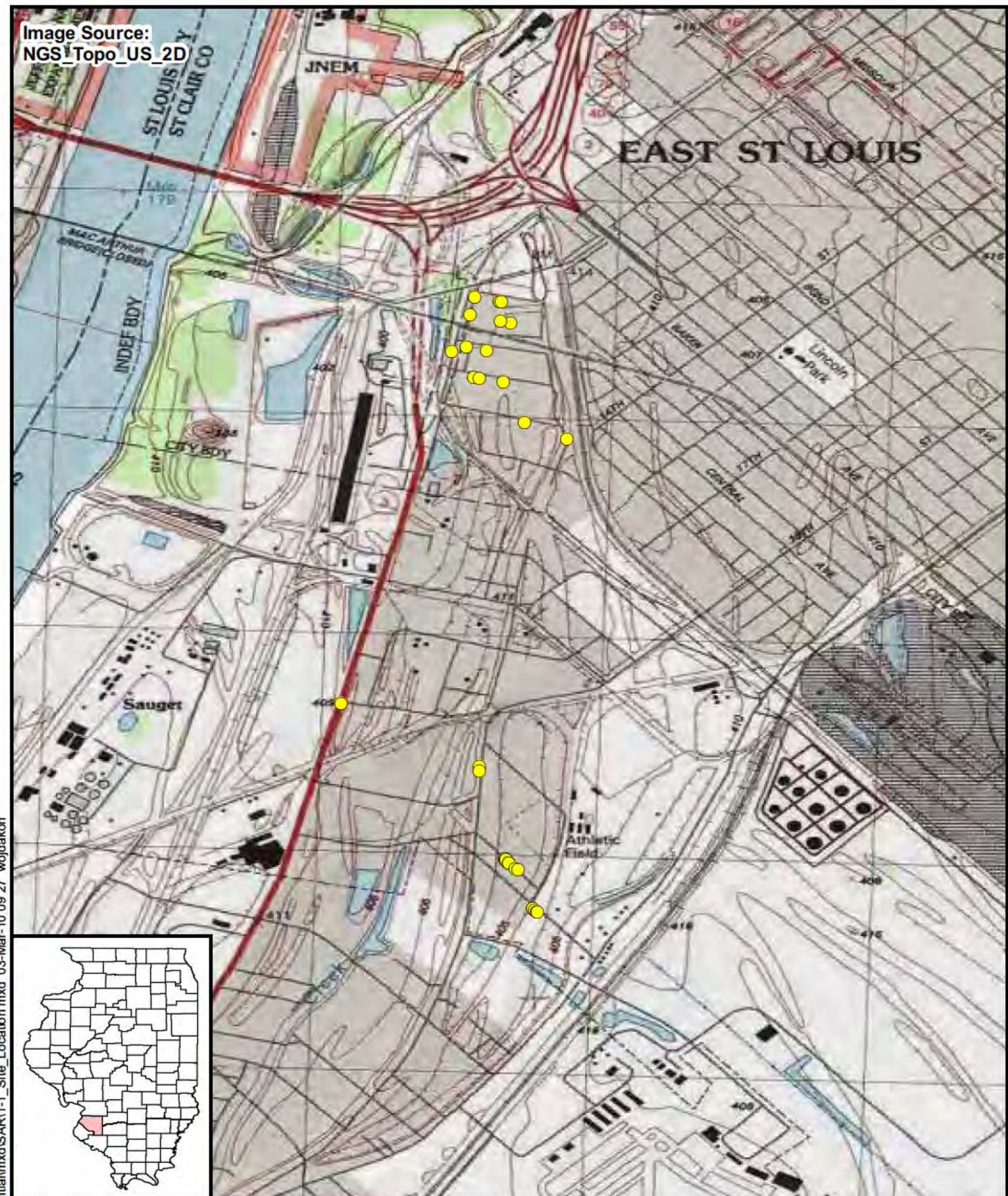
In accordance with the CSM, if removal action is planned for Sauget Field and Rush City Playground, further sampling may be needed because the three composite samples collected from the field are not sufficient to be considered representative of the large exposure areas. For example, if the Sauget Field is approximately 25 acres in size and considered to be one exposure area, approximately 50 total samples (0.5-acre grids) would be required to derive a representative EPC.

6.2 RECOMMENDATIONS

Based on conclusions drawn from the CSM and an evaluation of the NCP criteria, the recommendations summarized below should be considered for the Site.

- The U.S. EPA National Dioxin Workgroup is considering changes to the PRG for dioxin, should this happen, data may be re-evaluated as appropriate.
- U.S. EPA should evaluate whether a removal action is warranted at the six residential properties where site assessment composite soil sampling results exceeded the PCB PRG.
- If a removal action is planned, additional representative samples may be warranted from Sauget Field, Rush City Playground, and the other properties associated with **Non-Responsive** Street (adjacent properties with the same owner) to determine areas that may require remediation.
- If a removal action is planned, additional sampling may be warranted at other nearby residences because of the presence of PCBs in surface soils at concentrations exceeding 1 ppm in the community. An investigation of prevailing wind patterns and historical industrial air emissions also may be useful to aid in the possible prediction of air pathway deposition patterns.

FIGURES



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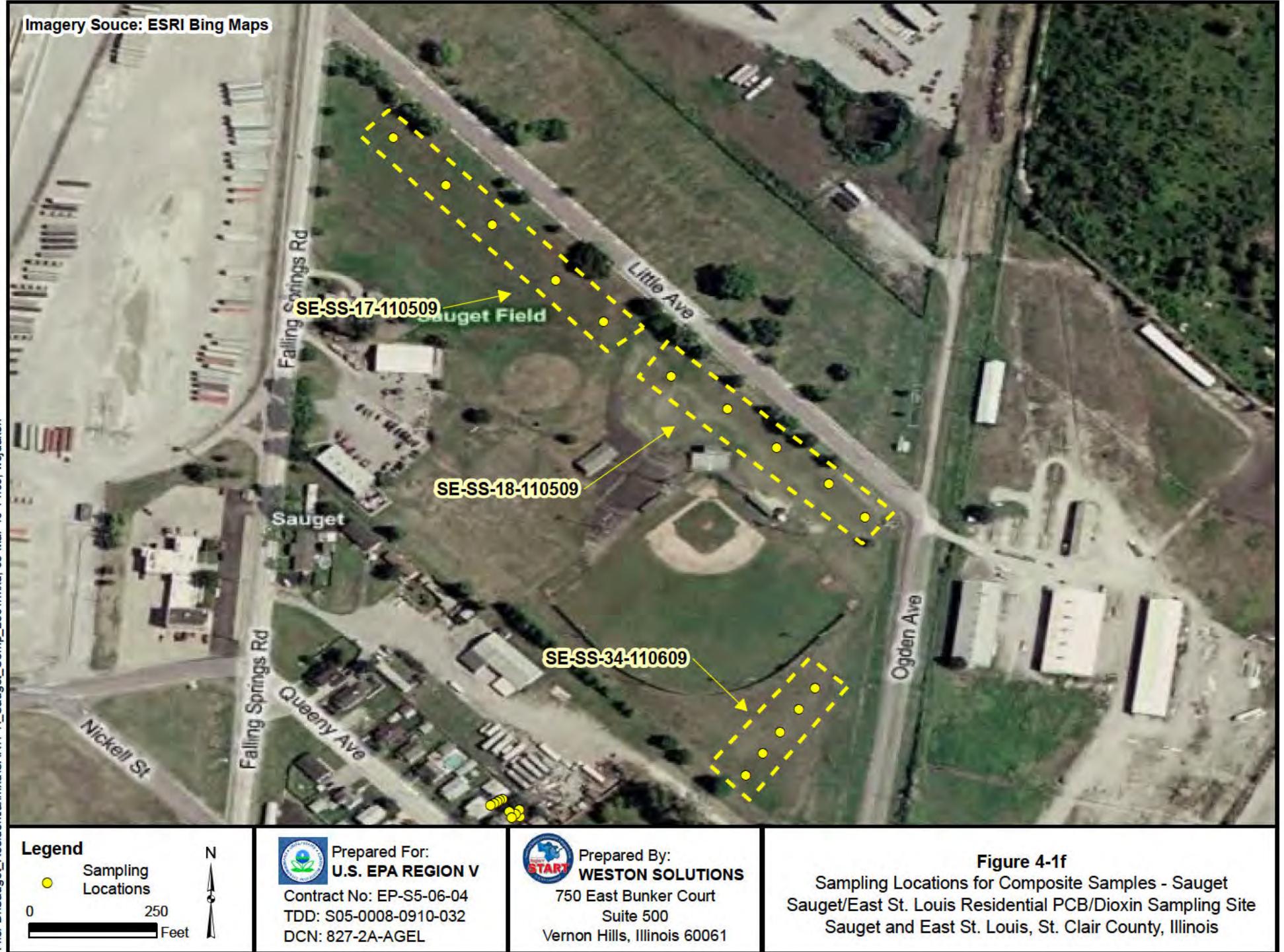
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DCN: 827 2A AGEL

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Figure 1-1
Site Location Map
Sauget/East St. Louis Residential
PCB/Dioxin Sampling Site
Sauget and East St. Louis,
St. Clair County, Illinois

Non-Responsive



Non-Responsive

Non-Responsive

Non-Responsive

Non-Responsive

TABLES

Table 4-1a
Dioxin/Furan and PCB Congener Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-01	SE-SS-02	SE-SS-03	SE-SS-04	SE-SS-05	SE-SS-05	SE-SS-06	SE-SS-07	SE-SS-08
Field Sample ID		SE-SS-01-110409	SE-SS-02-110409	SE-SS-03-110409	SE-SS-04-110409	SE-SS-05-110409	SE-SS-05-110409-D	SE-SS-06-110409	SE-SS-06-110409	SE-SS-07-110409	SE-SS-08-110409
Sampling Location		E. St. Louis	E. St. Louis	E. St. Louis	E. St. Louis	E. St. Louis	E. St. Louis	E. St. Louis	E. St. Louis	Rush City Playground	
Sampling Date		11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009
Chemical Name	Unit	Current SL (ppt)									
Solids, Total	%		79.3	79.2	77.8	77.4	79.7	80.2	72.5	78.4	82.1
Dioxin-Furans											
1,2,3,4,6,7,8-HxCDD	ppt	---	278	293	836 E	1,290 E	257	302	981 E	1,560 E	1,620 E
1,2,3,4,6,7,8-HpCDF	ppt	---	80.4	111	256	369	60.7	71.6	261	479	296
1,2,3,4,7,8,9-HpCDF	ppt	---	8.95	12.3	14.7	33.2	6.47	7.29	28	81.2	28.5
1,2,3,4,7,8-HxCDD	ppt	---	2.17 J	3.23	10.4	12.2	3.03	3.09	10.1	14.2	13.9
1,2,3,4,7,8-HxCDF	ppt	---	8.64	12.9	30	51.2	8.05	9.01	29.4	59.8	26.8
1,2,3,6,7,8-HxCDD	ppt	---	10.3	11.2	28.2	43.3	8.05	10.1	31.5	50.3	35.6
1,2,3,6,7,8-HxCDF	ppt	---	5.4	8.85	19.1	29.8	4.31	5.31	17.6	32.6	14.5
1,2,3,7,8,9-HxCDD	ppt	---	7.14	7.63	27.6	31.7	5.92	7.62	24.7	37.2	36.2
1,2,3,7,8,9-HxCDF	ppt	---	2.92 U	2.98 U	3.12 U	2.85 U	2.94 U	3.05 U	3.35 U	3.09 U	2.74 U
1,2,3,7,8-PeCDD	ppt	---	2.25 J	2.54 J	4.51 K	7.52	1.7 J	1.9 J	5.92	9.89	7.28
1,2,3,7,8-PeCDF	ppt	---	2.51 J	4.07	5.36	11.6	2.18 J	2.36 J	7.9	14.2	6.12
2,3,4,6,7,8-HxCDF	ppt	---	5.46	9.4	23.8	35.1	3.96	6.24	18.4	39.1	19.6
2,3,4,7,8-PeCDF	ppt	---	2.51 J	3.56	7.49	16.2	3.03	2.72 J	8.78	14.7	8.2
2,3,7,8-TCDD	ppt	---	1.17 U	1.18 J	1.21 JK	3.91	0.711 J	0.858 J	2.62	4.85	2.28
2,3,7,8-TCDF	ppt	---	2.82	5.94	4.44	16.8	2.29 K	2.72	8.87	13.1	5.93
OCDD	ppt	---	4,440 E	4,430 BE	7,880 BE	18,500 BE	4,020 BE	4,690 BE	37,700 BE	19,800 BE	18,700 BE
OCDF	ppt	---	288	377	612	1,440 E	245	295	1,130	2,700 E	1,400 E
Total Hepta-Dioxins	ppt	---	608	645	1,750	2,960	620	742	2,910	4,200	7,800
Total Hepta-Furans	ppt	---	239	299	608	1,110	185	222	780	1,670	988
Total Hexa-Dioxins	ppt	---	89.1	102	306	392	81.6	97.3	368	542	901
Total Hexa-Furans	ppt	---	91.9	153	339	604	84.2	98.4	319	646	350
Total Penta-Dioxins	ppt	---	32.5	36.2	36.9	85.5	21.5	24.4	70.5	127	91.9
Total Penta-Furans	ppt	---	50.5	112	185	459	58.3	70.6	177	351	144
Total Tetra-Dioxins	ppt	---	15.4	26.2	44.3	94.7	17.2	21.2	87.5	155	41.2
Total Tetra-Furans	ppt	---	45.2	77.9	111	234	43.7	42.4	77.9	231	80.4
Total TEQ	ppt	---	12.4	16.4	36.1	61.6	11.5	13.4	49.8	72.2	52.9
PCB Congeners											
PCB 81	ppt	---	NA	NA	NA	90.7 J	NA	NA	NA	NA	NA
PCB 77	ppt	---	NA	NA	NA	1,830	NA	NA	NA	NA	NA
PCB 123	ppt	---	NA	NA	NA	5,130	NA	NA	NA	NA	NA
PCB 118	ppt	---	NA	NA	NA	273000 B	NA	NA	NA	NA	NA
PCB 114	ppt	---	NA	NA	NA	1,890	NA	NA	NA	NA	NA
PCB 105	ppt	---	NA	NA	NA	99,300 B	NA	NA	NA	NA	NA
PCB 126	ppt	---	NA	NA	NA	355	NA	NA	NA	NA	NA
PCB 167	ppt	---	NA	NA	NA	33,100 B	NA	NA	NA	NA	NA
PCBs 156 + 157	ppt	---	NA	NA	NA	94,300 B	NA	NA	NA	NA	NA
PCB 169	ppt	---	NA	NA	NA	185	NA	NA	NA	NA	NA
PCB 189	ppt	---	NA	NA	NA	2,420	NA	NA	NA	NA	NA
Total TEQ	ppt	---	NA	NA	NA	56.5	NA	NA	NA	NA	NA
Total TEQ	ppt	1,000	12.4	16.4	36.1	118.1	11.5	13.4	49.8	72.2	52.9

Table 4-1a
Dioxin/Furan and PCB Congener Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

	Chemical Name	Unit	Current SL (ppt)								
			Location ID	SE-SS-09	SE-SS-10	SE-SS-11	SE-SS-12	SE-SS-13	SE-SS-14	SE-SS-15	SE-SS-16
			Field Sample ID	SE-SS-09-110409	SE-SS-10-110409	SE-SS-11-110409	SE-SS-12-110409	SE-SS-13-110509	SE-SS-14-110509	SE-SS-15-110509	SE-SS-16-110509
			Sampling Location	E. St. Louis							
			Sampling Date	11/4/2009	11/4/2009	11/4/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009
Solids, Total	%			76.7	75.2	78.5	72.4	69.8	77.2	68.3	72.2
Dioxin-Furans											
1,2,3,4,6,7,8-HxCDD	ppt	---	236	1,190 E	1,140 E	2,370 E	722 E	654 E	3,240 E	1,390 E	
1,2,3,4,6,7,8-HxCDF	ppt	---	52.8	306	244	516	240	157	1,200 E	403	
1,2,3,4,7,8,9-HxCDF	ppt	---	4.53	30.3	28.1	38	38.5	15.1	140	49.5	
1,2,3,4,7,8-HxCDD	ppt	---	2.69 J	12.6	16.5	24.3	12.7	5.83	46.8	19	
1,2,3,4,7,8-HxCDF	ppt	---	8.33	35.8	31.7	40.4	40.7	19.2	210	57.9	
1,2,3,6,7,8-HxCDD	ppt	---	7.28	40.4	37.2	57.9	22.8	19.9	104	45.3	
1,2,3,6,7,8-HxCDF	ppt	---	3.77	18.4	12.7	13.5 K	19.6	6.36	81.6	25.6	
1,2,3,7,8,9-HxCDD	ppt	---	5.83	28.4	32.2	46	21.4	11.9	94	36.4	
1,2,3,7,8,9-HxCDF	ppt	---	3.15 U	3 15 U	3.07 U	2.89 U	3.12 U	3.2 U	3.65 U	3.35 U	
1,2,3,7,8-PeCDD	ppt	---	1.36 J	8.23	8.26	10.6	7.82	3.44	27.6	11.1	
1,2,3,7,8-PeCDF	ppt	---	1.75 J	9.37	6.11	6.91	12.3	3.79	44.4	13.7	
2,3,4,6,7,8-HxCDF	ppt	---	4.37	15.6	18.2	25	14.6	11.6	66	24.2	
2,3,4,7,8-PeCDF	ppt	---	1.94 J	13.3	6.26	8.83	10.9	4.65	53.9	14.8	
2,3,7,8-TCDD	ppt	---	1.26 U	9.12	2.77	7	2.28	1.98	13.9	6.73	
2,3,7,8-TCDF	ppt	---	1.45	10.5	6.21	8.92	10.7	5.55	56.3	15.7	
OCDD	ppt	---	3,660 BE	17,200 BE	10,700 BE	28,700 BE	6,440 BE	12,000 BE	37,000 BE	23,800 BE	
OCDF	ppt	---	205	1,410 E	925	2,210 E	828	404	3,520 E	1,460 E	
Total Hepta-Dioxins	ppt	---	878	3,260	2,290	5,030	1,360	1,350	6,520	2,860	
Total Hepta-Furans	ppt	---	151	995	865	1,900	708	578	3,840	1,300	
Total Hexa-Dioxins	ppt	---	109	459	345	458	240	172	964	419	
Total Hexa-Furans	ppt	---	64.8	395	304	488	341	226	1,280	376	
Total Penta-Dioxins	ppt	---	10.1	108	147	110	118	42.5	352	140	
Total Penta-Furans	ppt	---	30.8	217	147	177	207	123	959	295	
Total Tetra-Dioxins	ppt	---	6.28	148	101	187	132	25	358	195	
Total Tetra-Furans	ppt	---	13.3	184	136	179	203	86.7	995	302	
Total TEQ	ppt	---	9.46	58.6	46.2	80.6	40.2	27	183	71.1	
PCB Congeners											
PCB 81	ppt	---	NA	NA	NA	119 J	NA	77.8 J	436	NA	
PCB 77	ppt	---	NA	NA	NA	1,510	NA	1,220	13,900 B	NA	
PCB 123	ppt	---	NA	NA	NA	683	NA	1,270	9,570	NA	
PCB 118	ppt	---	NA	NA	NA	22,400 E	NA	74,000 B	491,000 B	NA	
PCB 114	ppt	---	NA	NA	NA	826	NA	1,780	8,240	NA	
PCB 105	ppt	---	NA	NA	NA	15,100 E	NA	34,500 B	259,000 B	NA	
PCB 126	ppt	---	NA	NA	NA	279	NA	102 J	2,240	NA	
PCB 167	ppt	---	NA	NA	NA	2150 B	NA	3,540	44,000 B	NA	
PCBs 156 + 157	ppt	---	NA	NA	NA	6800 B	NA	14,800 B	147,000 B	NA	
PCB 169	ppt	---	NA	NA	NA	59.1 J	NA	53.6 J	181	NA	
PCB 189	ppt	---	NA	NA	NA	627	NA	579	2,960	NA	
Total TEQ	ppt	---	NA	NA	NA	31.3	NA	15.9	260	NA	
Total TEQ	ppt	1,000	9.46	58.6	46.2	111.9	40.2	42.9	443	71.1	

Table 4-1a
Dioxin/Furan and PCB Congener Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-17	SE-SS-18	SE-SS-19	SE-SS-20	SE-SS-21	SE-SS-22	SE-SS-23	SE-SS-23	SE-SS-24
		Field Sample ID	SE-SS-17-110509	SE-SS-18-110509	SE-SS-19-110509	SE-SS-20-110509	SE-SS-21-110509	SE-SS-22-110509	SE-SS-23-110509	SE-SS-23-110509-D	SE-SS-24-110609
		Sampling Location	Sauget Field	Sauget Field	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive
		Sampling Date	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/6/2009
Chemical Name	Unit	Current SL (ppt)									
Solids, Total	%		74.3	74.6	74.4	76.5	76.4	79.1	79.5	77	74
Dioxin-Furans											
1,2,3,4,6,7,8-HpCDD	ppt	---	5,610 E	8,840 B	1,730 BE	2,730 B	16,500 B	72.9 B	2,570 BE	1,780 BE	2,910 BE
1,2,3,4,6,7,8-HpCDF	ppt	---	2,260	3,290 B	508 B	707 B	6,060 B	19.6 B	771 BE	536 B	1,040 BE
1,2,3,4,7,8,9-HpCDF	ppt	---	156	190	27 3	57.7	293	1.29 J	54.9	34.6	71.5
1,2,3,4,7,8-HxCDD	ppt	---	51.1 K	59.7	11 2	17.6	118	0.891 J	24.1	11.7	20.7
1,2,3,4,7,8-HxCDF	ppt	---	144	147	35	46.2	199	1.66 J	47.9	29.7	57.2
1,2,3,6,7,8-HxCDD	ppt	---	163	234	46 2	95.8	385	2.31 JK	67.8	50.1	83.2
1,2,3,6,7,8-HxCDF	ppt	---	58.1	69	10.7	13	83.4 K	0.795 JK	25	14.2	25.9
1,2,3,7,8,9-HxCDD	ppt	---	139	131	27 5	47.1	257	2.35 J	96.7	32	52.4
1,2,3,7,8,9-HxCDF	ppt	---	3.34 U	3.23 U	3.13 U	3.07 U	3.08 U	3 U	2.92 U	3.07 U	3.25 U
1,2,3,7,8-PeCDD	ppt	---	35.5	28.7	5.74	8.59	48.5	0.659 J	8.65 K	5.88	10.1
1,2,3,7,8-PeCDF	ppt	---	22.7	21.9 P	5.87	5.37	26.9 KP	0.355 J	6.8	4.52	5.03 K
2,3,4,6,7,8-HxCDF	ppt	---	40.1	47.8	14.7	13 9	124	0.761 J	20.4	15.4	35.3
2,3,4,7,8-PeCDF	ppt	---	30.4	24.6	14.8	8.02	31.3	0.44 J	7.25	5.47	7.78
2,3,7,8-TCDD	ppt	---	20.1	10.9	2.49	4.33	22	1.2 U	4.57	4.08	3.92
2,3,7,8-TCDF	ppt	---	33.1	21.2	8.45	5.16	19.5	0.507 J	5.56	4.05	5.03
OCDD	ppt	---	41,800 BE	86,400 B	22,100 BE	39,700 B	153,000 B	1,680 BE	25,400 BE	195,00 BE	29,900 BE
OCDF	ppt	---	10,500	23,100 B	3,790 BE	5,970 B	42,100 B	76.6 B	5,770 BE	3,950 BE	7,310 BE
Total Hepta-Dioxins	ppt	---	10,800	15,300	3,600	7,990	28,200	148	5,180	3,670	6,010
Total Hepta-Furans	ppt	---	6,940	11,500	2,160	4,420	19,500	62.4	3,230	2,220	4,310
Total Hexa-Dioxins	ppt	---	1,270	1,650	335	622	2,890	19.2	1,090	361	597
Total Hexa-Furans	ppt	---	1,550	1,230	245	876	1,990	18.2	629	263	534
Total Penta-Dioxins	ppt	---	390	200	67.2	114	504	5.15	50.2	77.9	105
Total Penta-Furans	ppt	---	533	540	220	212	723	5.64	134	110	165
Total Tetra-Dioxins	ppt	---	459	228	155	832	338	0.585 J	90.6	68	54
Total Tetra-Furans	ppt	---	674	422	195	99.8	341	2.55	99.7	68.2	88.5
Total TEQ	ppt	---	224	275	58.6	88	486	3.19	87.7	58	95.8
PCB Congeners											
PCB 81	ppt	---	245	NA	50.1 JK	51.9 J	125	NA	40 1 J	40.8 J	NA
PCB 77	ppt	---	5,100 B	NA	821 B	648 B	1,680 B	NA	51 5 B	593 B	NA
PCB 123	ppt	---	1,100	NA	408	289	966	NA	261	237	NA
PCB 118	ppt	---	43,500 BE	NA	11,400 BE	9,780 B	25,200 BE	NA	6,440 B	6,310 B	NA
PCB 114	ppt	---	1,400	NA	362	297	1,040	NA	275	262	NA
PCB 105	ppt	---	28,700 BE	NA	7,730 B	6,710 B	19,700 BE	NA	4,830 B	4,640 B	NA
PCB 126	ppt	---	403	NA	87.0 J	90.9 J	500	NA	139	126	NA
PCB 167	ppt	---	4,620 B	NA	1,280 B	1,180 B	4,820 B	NA	1,160 B	1,070 B	NA
PCBs 156 + 157	ppt	---	16,700 BE	NA	3,610 B	3,640 B	15,100 BE	NA	3,760 B	3,400 B	NA
PCB 169	ppt	---	169	NA	47.3 J	61.1 J	207	NA	52 5 J	39.8 J	NA
PCB 189	ppt	---	2,620	NA	682	625	3,170	NA	754	637	NA
Total TEQ	ppt	---	48.9	NA	11	11.7	58.5	NA	16.1	14.4	NA
Total TEQ	ppt	1,000	272 9	275	69.6	99.7	544.5	3.19	103.8	72.4	95.8

Table 4-1a
Dioxin/Furan and PCB Congener Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-25	SE-SS-26	SE-SS-27	SE-SS-28	SE-SS-29	SE-SS-30	SE-SS-31	SE-SS-32	SE-SS-33
		Field Sample ID	SE-SS-25-110609	SE-SS-26-110609	SE-SS-27-110609	SE-SS-28-110609	SE-SS-29-110609	SE-SS-30-110609	SE-SS-31-110609	SE-SS-32-110609	SE-SS-33-110609
		Sampling Location	Non-Responsive								
		Sampling Date	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009
Chemical Name	Unit	Current SL (ppt)									
Solids, Total	%		75.3	75.1	76.2	76.5	72 1	76.7	75.5	79.7	74.1
Dioxin-Furans											
1,2,3,4,6,7,8-HxCDD	ppt	---	2,150 BE	1,050 BE	4,750 B	7,190 B	19,600 B	5,740 B	18,700 B	17,400	4,510
1,2,3,4,6,7,8-HpCDF	ppt	---	613 B	297 B	962 B	1,950 B	4,230 B	1,290 B	5,450 B	4,620	1,370
1,2,3,4,7,8,9-HpCDF	ppt	---	52.4	17.9	55.5	62.1	270	94.5	573	235	77.6
1,2,3,4,7,8-HxCDD	ppt	---	18	6.79	25.5	21.1	43	27.2	174	96.6	39.1
1,2,3,4,7,8-HxCDF	ppt	---	52.4	20.8	50.9	47.2	106	66.8	367	176	80.3
1,2,3,6,7,8-HxCDD	ppt	---	61.1	29.2	141	107	347	149	526 JD	451	110
1,2,3,6,7,8-HxCDF	ppt	---	25.2	10.6	26.4	20.2	41.4	31.1	155	79.4	31.8
1,2,3,7,8,9-HxCDD	ppt	---	36.1 K	18.3	72.2	60.3	121	81.1	385	302	114
1,2,3,7,8,9-HxCDF	ppt	---	3.2 U	2.8 U	2.93 U	2.94 U	2.93 U	3.14 U	3.25 U	1.74 J	2 JP
1,2,3,7,8-PeCDD	ppt	---	9.32	4.46	13	9.89	21	15.7	79.4	55.4	22 1
1,2,3,7,8-PeCDF	ppt	---	6.37	2 96 K	8.98	5.19 K	10	7.78	38.7	23.3	12.4
2,3,4,6,7,8-HxCDF	ppt	---	32.4	12	34.1	26.1	56.6	37.7	206	110	41
2,3,4,7,8-PeCDF	ppt	---	10.5	3.76	11.4	10.3	17.4	13.7	63.5	32.3	15 1
2,3,7,8-TCDD	ppt	---	41.4	2.46	7.22	7.8	9.29	6.8	41.4	28.1	18 2
2,3,7,8-TCDF	ppt	---	8.34	4.07	9.81	6.23	11.3	11.3	41	20.8	14
OCDD	ppt	---	27,500 BE	11,300 BE	38,000 BE	87,400 BE	1,120,000 B	62,300 BE	255,000 B	317,000 BE	55,400 BE
OCDF	ppt	---	3,970 BE	1,940 BE	5,660 B	18,500 B	83,600 B	12,500 B	57,800 B	45,400	9,940
Total Hepta-Dioxins	ppt	---	4,420	2,250	6,690	7,240	24,900	10,200	55,200	27,000	8,480
Total Hepta-Furans	ppt	---	2,350	1,160	2,870	4,500	19,400	5,910	37,900	16,900	5,240
Total Hexa-Dioxins	ppt	---	443	247	790	639	1,830	988	5,090	2,890	1,060
Total Hexa-Furans	ppt	---	592	262	490	776	992	575	3,460	1,690	923
Total Penta-Dioxins	ppt	---	87.9	52.8	145	113	180	158	759	279	232
Total Penta-Furans	ppt	---	201	83.3	267	226	411	309	1,420	635	215
Total Tetra-Dioxins	ppt	---	108	40.6	99.1	590	306	115	524	210	162
Total Tetra-Furans	ppt	---	111	55.2	167	189	182	192	747	298	169
Total TEQ	ppt	---	115	35.9	131	174	711	161	667	549	168
PCB Congeners											
PCB 81	ppt	---	43.8 J	NA	NA	NA	NA	NA	198	358	NA
PCB 77	ppt	---	591 B	NA	NA	NA	NA	NA	3490 B	5,660 B	NA
PCB 123	ppt	---	336	NA	NA	NA	NA	NA	1,890	1,540	NA
PCB 118	ppt	---	7,540 B	NA	NA	NA	NA	NA	62,300 B	45,800 B	NA
PCB 114	ppt	---	280	NA	NA	NA	NA	NA	2,040	1,770	NA
PCB 105	ppt	---	6,580 B	NA	NA	NA	NA	NA	40,200 B	31,100 B	NA
PCB 126	ppt	---	149	NA	NA	NA	NA	NA	645	570	NA
PCB 167	ppt	---	1,390 B	NA	NA	NA	NA	NA	11,200 B	7,360 B	NA
PCBs 156 + 157	ppt	---	4,380 B	NA	NA	NA	NA	NA	33,700 B	20,700 B	NA
PCB 169	ppt	---	61.7 J	NA	NA	NA	NA	NA	369	213	NA
PCB 189	ppt	---	796	NA	NA	NA	NA	NA	6,320	4,700	NA
Total TEQ	ppt	---	17.5	NA	NA	NA	NA	NA	80.7	67.4	NA
Total TEQ	ppt	1,000	132.5	35.9	131	174	711	161	747.7	616.4	168

Table 4-1a
Dioxin/Furan and PCB Congener Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

	Location ID	SE-SS-34	
	Field Sample ID	SE-SS-34-110609	
	Sampling Location	Sauget Field Sauget	
	Sampling Date	11/6/2009	
Chemical Name	Unit	Current SL (ppt)	
Solids, Total	%	74.7	
Dioxin-Furans			
1,2,3,4,6,7,8-HxCDD	ppt	---	450
1,2,3,4,6,7,8-HxCDF	ppt	---	168
1,2,3,4,7,8,9-HxCDF	ppt	---	18.9
1,2,3,4,7,8-HxCDD	ppt	---	4.71
1,2,3,4,7,8-HxCDF	ppt	---	17.2
1,2,3,6,7,8-HxCDD	ppt	---	15.8
1,2,3,6,7,8-HxCDF	ppt	---	8.07
1,2,3,7,8,9-HxCDD	ppt	---	15
1,2,3,7,8,9-HxCDF	ppt	---	3.19 U
1,2,3,7,8-PeCDD	ppt	---	3.24
1,2,3,7,8-PeCDF	ppt	---	3.43
2,3,4,6,7,8-HxCDF	ppt	---	7.51
2,3,4,7,8-PeCDF	ppt	---	3.23
2,3,7,8-TCDD	ppt	---	1.26 J
2,3,7,8-TCDF	ppt	---	2.64 K
OCDD	ppt	---	4,730 BE
OCDF	ppt	---	850
Total Hepta-Dioxins	ppt	---	928
Total Hepta-Furans	ppt	---	612
Total Hexa-Dioxins	ppt	---	149
Total Hexa-Furans	ppt	---	170
Total Penta-Dioxins	ppt	---	48
Total Penta-Furans	ppt	---	57
Total Tetra-Dioxins	ppt	---	36.9
Total Tetra-Furans	ppt	---	37.1
Total TEQ	ppt	---	20.7
PCB Congeners			
PCB 81	ppt	---	NA
PCB 77	ppt	---	NA
PCB 123	ppt	---	NA
PCB 118	ppt	---	NA
PCB 114	ppt	---	NA
PCB 105	ppt	---	NA
PCB 126	ppt	---	NA
PCB 167	ppt	---	NA
PCBs 156 + 157	ppt	---	NA
PCB 169	ppt	---	NA
PCB 189	ppt	---	NA
Total TEQ	ppt	---	NA
Total TEQ	ppt	1,000	20.7

Notes:

ID = Identification

NA = Not analyzed

PCB = Polychlorinated biphenyl

ppt = Part per trillion

SL = U.S. EPA National Dioxin Workgroup screening level

TEQ = Toxic equivalent to 2,3,7,8-TCDD

U.S. EPA - United States Environmental Protection Agency

Data Qualifier Definitions:

B-Analyte detected in method blank as well as sample

E-Estimated concentration that exceeds upper end of linear calibration range

J-Estimated concentration below method reporting limit and above estimated detection limit

K-Ion abundance ratio outside QC limits; estimated maximum possible concentration for associated compound

P-Chloridphenylether interference present at retention time of target compound

U-Compound analyzed for but not detected at reporting limit

Table 4-1b
PCB Homolog Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-01	SE-SS-02	SE-SS-03	SE-SS-04	SE-SS-05	SE-SS-05
Field Sample ID		SE-SS-01-110409	SE-SS-02-110409	SE-SS-03-110409	SE-SS-04-110409	SE-SS-05-110409	SE-SS-05-110409-D	
Sampling Location		Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive
Sampling Date		11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		79.3	79.2	77.8	77.4	79.7	80.2
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Dichlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Trichlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Tetrachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Pentachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	1,700	250 U	150 U
Hexachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	1,400	250 U	150 U
Heptachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Octachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Nonachlorobiphenyls, Total	ppb	---	130 U	130 U	130 U	520 U	250 U	150 U
Decachlorobiphenyls, Total	ppb	---	180	320	130 U	1,300	250 U	150 U
Total PCBs	ppb	1,000	180	320	130 U	4,400	250 U	150 U

		Location ID	SE-SS-06	SE-SS-07	SE-SS-08	SE-SS-09	SE-SS-10	SE-SS-11
Field Sample ID		SE-SS-06-110409	SE-SS-07-110409	SE-SS-08-110409	SE-SS-09-110409	SE-SS-10-110409	SE-SS-11-110409	
Sampling Location		Non-Responsive	Non-Responsive	Rush City Playground E. St. Louis	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive
Sampling Date		11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009	11/4/2009
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		72.5	78.4	82.1	76.7	75.2	78.5
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Dichlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Trichlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Tetrachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Pentachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Hexachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Heptachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Octachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	25 U
Nonachlorobiphenyls, Total	ppb	---	280 U	180 U	73 U	78 U	270 U	33
Decachlorobiphenyls, Total	ppb	---	690	910	220	78 U	270 U	110
Total PCBs	ppb	1,000	690	910	220	78 U	270 U	143

Table 4-1b
PCB Homolog Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-12	SE-SS-13	SE-SS-14	SE-SS-15	SE-SS-16	SE-SS-17
Field Sample ID		SE-SS-12-110409	SE-SS-13-110509	SE-SS-14-110509	SE-SS-15-110509	SE-SS-16-110509	SE-SS-17-110509	
Sampling Location		Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Sauget Field
Sampling Date		11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	Sauget
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		72.4	69.8	77.2	68.3	72.2	74.3
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	27 U
Dichlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	27 U
Trichlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	27 U
Tetrachlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	44
Pentachlorobiphenyls, Total	ppb	---	56	140 U	140	800	280 U	99
Hexachlorobiphenyls, Total	ppb	---	93	140 U	78 U	470	280 U	110
Heptachlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	120
Octachlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	78
Nonachlorobiphenyls, Total	ppb	---	55 U	140 U	78 U	290 U	280 U	140
Decachlorobiphenyls, Total	ppb	---	61	450	78 U	330	570	510
Total PCBs	ppb	1,000	210	450	140	1,600	570	1,101

		Location ID	SE-SS-18	SE-SS-19	SE-SS-20	SE-SS-21	SE-SS-22	SE-SS-23
Field Sample ID		SE-SS-18-110509	SE-SS-19-110509	SE-SS-20-110509	SE-SS-21-110509	SE-SS-22-110509	SE-SS-23-110509	
Sampling Location		Sauget Field	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive	Non-Responsive
Sampling Date		11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009	11/5/2009
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		74.6	74.4	76.5	76.4	79.1	79.5
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	27 U	27 UJ	26 UJ	110 UJ	25 UJ	25 UJ
Dichlorobiphenyls, Total	ppb	---	27 U	27 UJ	26 UJ	110 UJ	25 UJ	25 UJ
Trichlorobiphenyls, Total	ppb	---	27 U	27 UJ	26 UJ	110 UJ	25 UJ	25 UJ
Tetrachlorobiphenyls, Total	ppb	---	27 U	27 UJ	26 UJ	110 UJ	25 UJ	25 UJ
Pentachlorobiphenyls, Total	ppb	---	27 U	27 UJ	38 J	110 UJ	25 UJ	25 UJ
Hexachlorobiphenyls, Total	ppb	---	27 U	44 J	54 J	160 J	25 UJ	26 J
Heptachlorobiphenyls, Total	ppb	---	27 U	27 UJ	42 J	160 J	25 UJ	25 UJ
Octachlorobiphenyls, Total	ppb	---	27 U	27 UJ	26 UJ	110 UJ	25 UJ	25 UJ
Nonachlorobiphenyls, Total	ppb	---	32	27 UJ	26 UJ	200 J	25 UJ	55 J
Decachlorobiphenyls, Total	ppb	---	120	52 J	68 J	840 J	25 UJ	230 J
Total PCBs	ppb	1,000	152	96 J	202 J	1360 J	25 UJ	311 J

Table 4-1b
PCB Homolog Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

		Location ID	SE-SS-23	SE-SS-24	SE-SS-25	SE-SS-26	SE-SS-27	SE-SS-28
Field Sample ID		SE-SS-23-110509-I	SE-SS-24-110609	SE-SS-25-110609	SE-SS-26-110609	SE-SS-27-110609	SE-SS-28-110609	
Sampling Location		Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	
Sampling Date		11/5/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		77	74	75.3	75.1	76.2	76.5
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Dichlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Trichlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Tetrachlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Pentachlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Hexachlorobiphenyls, Total	ppb	---	32 J	54 UJ	36 J	27 U J	52 UJ	52 U J
Heptachlorobiphenyls, Total	ppb	---	36 J	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Octachlorobiphenyls, Total	ppb	---	26 UJ	54 UJ	27 UJ	27 U J	52 UJ	52 U J
Nonachlorobiphenyls, Total	ppb	---	65 J	54 UJ	27 UJ	27 U J	62 J	52 U J
Decachlorobiphenyls, Total	ppb	---	260 J	140 J	77 J	35 J	190 J	160 J
Total PCBs	ppb	1,000	393 J	140 J	113 J	35 J	252 J	160 J

		Location ID	SE-SS-29	SE-SS-30	SE-SS-31	SE-SS-32	SE-SS-33	SE-SS-34
Field Sample ID		SE-SS-29-110609	SE-SS-30-110609	SE-SS-31-110609	SE-SS-32-110609	SE-SS-33-110609	SE-SS-34-110609	
Sampling Location		Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Non-Responsive Sauget	Sauget Field	
Sampling Date		11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	11/6/2009	
Chemical Name	Unit	SL (ppb) ^a						
Solids, Total	%		72.1	76.7	75.5	79.7	74.1	74.7
PCB Homologs								
Monochlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	54 U	27 U
Dichlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	54 U	27 U
Trichlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	54 U	27 U
Tetrachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	54 U	27 U
Pentachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	600	230	54 U	27 U
Hexachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	660	340	54 U	27 U
Heptachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	420	240	54 U	27 U
Octachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	99	27 U
Nonachlorobiphenyls, Total	ppb	---	140 UJ	100 UJ	260 U	130 U	59	27 U
Decachlorobiphenyls, Total	ppb	---	140 UJ	120 J	310	200	110	64
Total PCBs	ppb	1,000	140 UJ	120 J	1,990	1,010	268	64

Table 4-1b
PCB Homolog Results
Sauget/East St. Louis Residential PCB/Dioxin Sampling Site
Sauget and East St. Louis, IL

Notes:

Shaded results exceed the SL.

ID = Identification

PCB = Polychlorinated biphenyl

ppb = Part per billion

SL = U.S. EPA Toxic Substances Control Act residential screening level

U.S. EPA - United States Environmental Protection Agency

Data Qualifier Definitions:

J-Estimated concentration below method reporting limit and above estimated detection limit

U-Compound analyzed for but not detected at reporting limit

UJ - Compound not detected reporting limit, which should be considered estimated

APPENDIX A
PHOTOGRAPHIC DOCUMENTATION

Non-Responsive



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

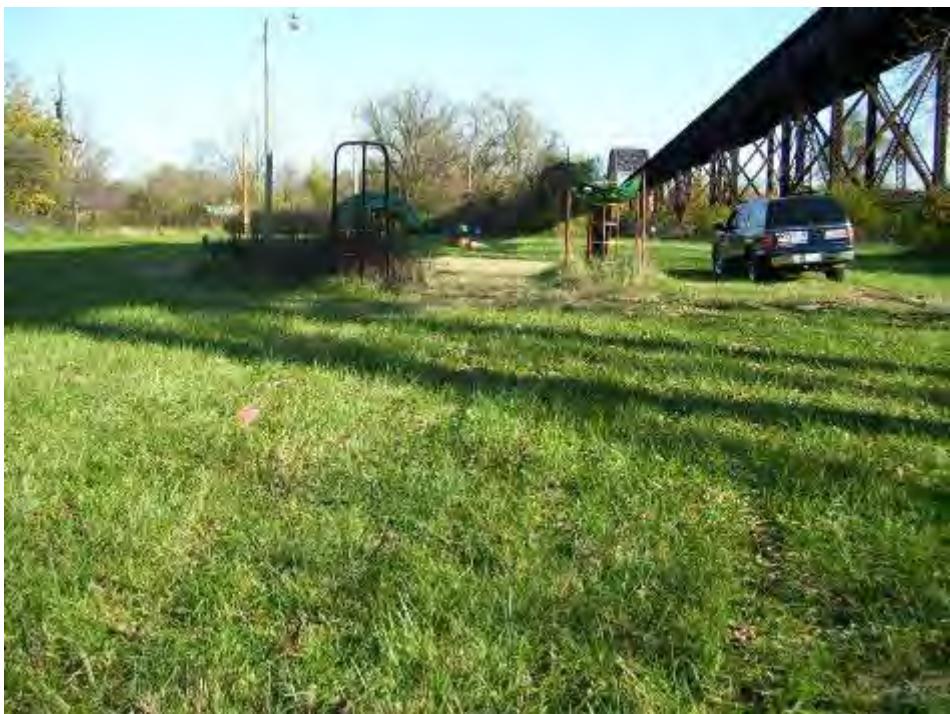
Photograph No.: 15

Date: 11/4/09

Direction: West

Photographer: Thomas Binz

Subject: Rush City Playground, East St. Louis, IL



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 16

Date: 11/4/09

Direction: East

Photographer: Thomas Binz

Subject: Rush City Playground, East St. Louis, IL

Non-Responsive



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 35

Date: 11/5/09

Direction: Northwest

Photographer: Thomas Binz

Subject: Sauget Field, Sauget, IL



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 36

Date: 11/5/09

Direction: Southeast

Photographer: Thomas Binz

Subject: Sauget Field, Sauget, IL



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 37

Direction: Northwest

Subject: Sauget Field, Sauget, IL

Date: 11/5/09

Photographer: Thomas Binz



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 38

Direction: Southeast

Subject: Sauget Field, Sauget, IL

Date: 11/5/09

Photographer: Thomas Binz

Non-Responsive



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 69

Direction: Southwest

Subject: Sauget Field, Sauget, IL

Date: 11/6/09

Photographer: Thomas Binz



Site: Sauget/East St. Louis Residential PCB/Dioxin Sampling

Photograph No.: 70

Direction: North

Subject: Sauget Field, Sauget, IL

Date: 11/6/09

Photographer: Thomas Binz

APPENDIX B

LABORATORY ANALYTICAL REPORT

AND DATA VALIDATION REPORT

**SAUGET/E. ST. LOUIS RESIDENTIAL PCB/DIOXIN SAMPLING
SAUGET AND E. ST. LOUIS, ILLINOIS
DATA VALIDATION REPORT**

Date: December 15, 2009

Laboratory: Columbia Analytical Services (CAS), Houston, Texas

Laboratory Work Order #: R0906411

Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START)

Weston Analytical Work Order #/TDD #: 20405.016.008.0828.00/S05-0008-0910-033

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 36 soil samples collected for the Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site (Sauget) that were analyzed for dioxins and furans using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8290.

A quality assurance (QA) level IV data package was received from CAS. The data validation was conducted in general accordance with the U.S. EPA Analytical Services Branch "National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins and Chlorinated Dibenzofurans Data Review" dated September 2005. The attachment contains the results summary sheets.

DIOXINS AND FURANS BY U.S. EPA SW-846 METHOD 8290

1. Samples

The following table summarizes the soil samples for which this data validation was conducted.

Samples	Lab ID	Date Collected	Date Extracted	Date Analyzed
SE-SS-01-110409	R0906411-001	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-02-110409	R0906411-002	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-03-110409	R0906411-003	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-04-110409	R0906411-004	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-05-110409	R0906411-005	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-05-110409-D	R0906411-006	11/04/2009	11/10/2009	11/13/2009 – 11/15/2009
SE-SS-06-110409	R0906411-007	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-07-110409	R0906411-008	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-08-110409	R0906411-009	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-09-110409	R0906411-010	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-10-110409	R0906411-011	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-11-110409	R0906411-012	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-12-110409	R0906411-013	11/04/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-13-110509	R0906411-014	11/05/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-14-110509	R0906411-015	11/05/2009	11/10/2009	11/14/2009 – 11/15/2009

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: R0906411

Samples	Lab ID	Date Collected	Date Extracted	Date Analyzed
SE-SS-15-110509	R0906411-016	11/05/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-16-110509	R0906411-017	11/05/2009	11/10/2009	11/14/2009 – 11/15/2009
SE-SS-17-110509	R0906411-018	11/05/2009	11/10/2009	11/14/2009 – 12/2/2009
SE-SS-18-110509	R0906411-019	11/05/2009	11/11/2009	11/16/2009 – 12/4/2009
SE-SS-19-110509	R0906411-020	11/05/2009	11/11/2009	11/16/2009 – 11/17/2009
SE-SS-20-110509	R0906411-021	11/05/2009	11/11/2009	11/16/2009 – 12/4/2009
SE-SS-21-110509	R0906411-022	11/05/2009	11/11/2009	11/16/2009 – 12/4/2009
SE-SS-22-110509	R0906411-023	11/05/2009	11/11/2009	11/17/2009 – 12/4/2009
SE-SS-23-110509	R0906411-024	11/05/2009	11/11/2009	11/17/2009
SE-SS-23-110509-D	R0906411-025	11/05/2009	11/11/2009	11/17/2009
SE-SS-24-110609	R0906411-026	11/06/2009	11/11/2009	11/17/2009
SE-SS-25-110609	R0906411-027	11/06/2009	11/11/2009	11/17/2009
SE-SS-26-110609	R0906411-028	11/06/2009	11/11/2009	11/17/2009
SE-SS-27-110609	R0906411-029	11/06/2009	11/11/2009	11/17/2009 – 12/2/2009
SE-SS-28-110609	R0906411-030	11/06/2009	11/11/2009	11/17/2009 – 12/2/2009
SE-SS-29-110609	R0906411-031	11/06/2009	11/11/2009	11/17/2009 – 12/2/2009
SE-SS-30-110609	R0906411-032	11/06/2009	11/11/2009	11/17/2009 – 12/2/2009
SE-SS-31-110609	R0906411-033	11/06/2009	11/11/2009	11/17/2009 – 12/2/2009
SE-SS-32-110609	R0906411-034	11/06/2009	11/12/2009	11/18/2009 – 11/26/2009
SE-SS-33-110609	R0906411-035	11/06/2009	11/12/2009	11/18/2009 – 11/26/2009
SE-SS-34-110609	R0906411-036	11/06/2009	11/12/2009	11/18/2009 – 11/19/2009

2. Holding Times

The data validation guidance states that soil samples must be stored at 4°C ($\pm 2^{\circ}\text{C}$) in the dark from the time of collection until extraction for up to a period of one year. Samples were stored properly and analyzed within the one-year recommended holding time limit.

3. System Performance Checks

The perfluorokerosene (PK) standards were checked manually and it was verified that the resolving power was approximately 10,000.

A Window Defining Mixtrue (WDM) was analyzed by CAS as required and descriptor switching times were established.

The chromatographic peak separation between the 2,3,7,8-tetrachlorinated dibenzofuran (TCDF) peak and the 2,3,4,7-TCDF peak was resolved with a valley of $\leq 25\%$.

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: R0906411

The continuing calibration standards meet the quality control (QC) criteria for retention time (RT), relative retention time (RRT), and ion abundance ratio.

4. Initial Calibration Results

The relative standard deviations (RSD) for the relative response factors (RRF) were less than 20 percent for the 2,3,7,8-substituted compounds and 35 percent for the other compounds as required.

5. Continuing Calibration Results

The measured RRFs of each analyte were within the QC limit of \pm 20% difference (%D) for the 2,3,7,8-substituted compounds and \pm 35% D for all other compounds of the mean values established during initial calibration.

6. Identification Criteria

The following identification criteria have been spot-checked for in the investigative samples associated with this work order.

- The RRTs for the 2,3,7,8-substituted compounds were within the appropriate RRT windows.
- From the Selected Ion Current Profiles (SICP), it was verified that the ion current responses for the two quantitation ions for each analyte maximized simultaneously (within the same 2 seconds).
- From the SICPs, it was verified that for each analyte ion listed, the S/N ratio is \geq 2.5:1.
- The ion abundance ratios are within the criteria listed in Table A.4 of the data validation guidance except as follows. In a few instances, the ion abundance ratio criteria was not met; however, in these instances the laboratory flagged the results with a "K" and the estimated maximum possible concentration (EMPC) for the analyte was reported.

7. Blanks

Method blanks were analyzed with the samples as required and were free of target compound contamination above the reporting limit.

In the method blank analyzed on 11/13/2009, the following compound was detected in the method blank below the reporting limit:

- OCDD at 1.65 nanogram per kilogram (ng/kg).

In the method blank analyzed on 11/16/2009, the following compounds were detected in the method blank below the reporting limit:

- 1,2,3,4,6,7,8-HpCDD at 0.725 ng/kg;
- OCDD at 2.90 ng/kg;
- 1,2,3,4,6,7,8-HpCDF at 0.437 ng/kg;
- OCDF at 0.987 ng/kg;
- Total Hepta-Dioxins at 0.725 ng/kg; and
- Total Hepta-Furans at 0.226 ng/kg.

In the method blank analyzed on 11/18/2009, the following compounds were detected in the method blank below the reporting limit:

- OCDD at 0.418 ng/kg.

No qualifications were applied because of these minor method blank concentrations. All detected results were much greater than the method blank concentrations.

8. Laboratory Control Sample (LCS) Results

The LCS and LCS duplicate recoveries were within the laboratory-established QC limits for percent recovery and relative percent difference (RPD).

9. Compound Quantitation

A spot-check of four samples was performed to review the compound quantitation performed by the laboratory.

The individual and TEQ concentrations were calculated correctly using the appropriate toxicity equivalency factors (TEF).

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
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A second column confirmation was performed for detections of 2,3,7,8-TCDF.

The recoveries of the internal standards were within the QC limits. See Section 6 for a description of the ion abundance ratio review.

Some sample calculations were manually checked and found to be reported correctly.

The laboratory reported several results for some samples due to dilutions and re-analyses. The sample results that should be utilized are those listed for the TEQ calculations.

10. Field Duplicate Results

Sample SE-SS05-110409-D is a field duplicate of sample SE-SS05-110409 and sample SE-SS23-110509-D is a field duplicate of sample SE-SS23-110509. The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. Note that there is no established QC limit for RPD for field duplicates; however, 50 RPD is generally used for evaluation. The RPDs ranged from 2 to 101 percent. Only three RPDs exceeded 50 percent and all three were associated with field duplicate SE-SS23-110509-D. This likely indicates that this sample was slightly heterogeneous in nature for dioxin/furans.

11. Overall Assessment of Data

The data are acceptable use as qualified based on the information received.

ATTACHMENT

CAS

RESULTS SUMMARY WITH QUALIFIERS

Data Qualifier Flags – Dioxin/Furans

- **B** Indicates the associated analyte is found in the method blank, as well as in the sample.
- **C** Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225). The results from both the DB-5 column and the DB-225 column are included in this data package. The results from the DB-225 analyses should be used to evaluate the 2378-TCDF in the samples. The confirmed result should be used in determining the TEQ value for TCDF.
- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range.
- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the estimated detection limit (EDL).
- **K** EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.
- **U** Indicates the compound was analyzed and not detected.
- **Y** Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y'. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.
- **ND** Indicates concentration is reported as 'Not Detected.'
- **S** Peak is saturated; data not reportable.
- **P** Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
- **Q** Lock-mass interference by chlorodiphenyl ether compounds.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 0940
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-01-110409	Units:	ng/Kg
Lab Code:	R0906411-001	Basis:	Dry
		Percent Solids:	79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 1413
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.901g	Instrument Name:	E-HRMS-03
Data File Name:	P106026	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106019

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.127	1.17			1
1,2,3,7,8-PeCDD	2.25 J	0.115	2.92	1.66	1.000	1
1,2,3,4,7,8-HxCDD	2.17 J	0.345	2.92	1.17	0.998	1
1,2,3,6,7,8-HxCDD	10.3	0.313	2.92	1.15	1.000	1
1,2,3,7,8,9-HxCDD	7.14	0.331	2.92	1.22	1.009	1
1,2,3,4,6,7,8-HpCDD	278	0.836	2.92	1.08	1.000	1
OCDD	4440 E	0.506	5.84	0.90	1.000	1
2,3,7,8-TCDF	6.89 C	0.531	1.17	0.78	1.001	1
1,2,3,7,8-PeCDF	2.51 J	0.293	2.92	1.73	1.001	1
2,3,4,7,8-PeCDF	2.51 J	0.290	2.92	1.56	1.025	1
1,2,3,4,7,8-HxCDF	8.64	0.771	2.92	1.37	1.000	1
1,2,3,6,7,8-HxCDF	5.40	0.736	2.92	1.17	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.988	2.92			1
2,3,4,6,7,8-HxCDF	5.46	0.843	2.92	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	80.4	0.555	2.92	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	8.95	0.771	2.92	1.11	1.034	1
OCDF	288	0.173	5.84	0.90	1.004	1
Total Tetra-Dioxins	15.4	0.127	1.17	0.79		1
Total Penta-Dioxins	32.5	0.115	2.92	1.52		1
Total Hexa-Dioxins	89.1	0.313	2.92	1.28		1
Total Hepta-Dioxins	608	0.836	2.92	1.03		1
Total Tetra-Furans	45.2	0.531	1.17	0.70		1
Total Penta-Furans	50.5	0.290	2.92	1.64		1
Total Hexa-Furans	91.9	0.736	2.92	1.24		1
Total Hepta-Furans	239	0.555	2.92	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 0940
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-01-110409	Units:	Percent
Lab Code:	R0906411-001	Basis:	Dry
		Percent Solids:	79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 1413
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.901g	Instrument Name:	E-HRMS-03
Data File Name:	P106026	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106019

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	698.820	70		40-135	0.82	1.010
13C-1,2,3,7,8-PeCDD	1000	736.874	74		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1729.646	69		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1588.774	64		40-135	1.03	1.068
13C-OCDD	5000	2274.570	45		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	687.124	69		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	812.029	81		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1844.375	74		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1535.688	61		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	705.418	88		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-01-110409
Lab Code: R0906411-001
Service Request: R0906411
Date Collected: 11/4/09 0940
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.127	1	1	
1,2,3,7,8-PeCDD	2.25	0.115	1	1	2.25
1,2,3,4,7,8-HxCDD	2.17	0.345	1	0.1	0.217
1,2,3,6,7,8-HxCDD	10.3	0.313	1	0.1	1.03
1,2,3,7,8,9-HxCDD	7.14	0.331	1	0.1	0.714
1,2,3,4,6,7,8-HpCDD	278	0.836	1	0.01	2.78
OCDD	4440	0.506	1	0.0003	1.33
2,3,7,8-TCDF	2.82	0.0912	1	0.1	0.282
1,2,3,7,8-PeCDF	2.51	0.293	1	0.03	0.0753
2,3,4,7,8-PeCDF	2.51	0.290	1	0.3	0.753
1,2,3,4,7,8-HxCDF	8.64	0.771	1	0.1	0.864
1,2,3,6,7,8-HxCDF	5.40	0.736	1	0.1	0.540
1,2,3,7,8,9-HxCDF	ND	0.988	1	0.1	
2,3,4,6,7,8-HxCDF	5.46	0.843	1	0.1	0.546
1,2,3,4,6,7,8-HpCDF	80.4	0.555	1	0.01	0.804
1,2,3,4,7,8,9-HpCDF	8.95	0.771	1	0.01	0.0895
OCDF	288	0.173	1	0.0003	0.0864

Total TEQ

12.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-01-110409
Lab Code: R0906411-001
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 0940
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.901g
Data File Name: P204969
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0010
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	2.82	0.0912	1.16	0.81	1.001	1	
Labeled Compounds		Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio
13C-2,3,7,8-TCDF		1000	746.482	75		40-135	0.76
37Cl-2,3,7,8-TCDD		800	729.346	91		40-135	NA
							0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	ng/Kg
Lab Code:	R0906411-002	Basis:	Dry
		Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2005
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-03
Data File Name:	P106032	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.18 J	0.134	1.19	0.86	1.001	1
1,2,3,7,8-PeCDD	2.54 J	0.176	2.98	1.35	1.000	1
1,2,3,4,7,8-HxCDD	3.23	0.211	2.98	1.24	0.999	1
1,2,3,6,7,8-HxCDD	11.2	0.192	2.98	1.32	1.000	1
1,2,3,7,8,9-HxCDD	7.63	0.203	2.98	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	293	0.578	2.98	1.05	1.000	1
OCDD	4430 BE	0.214	5.97	0.89	1.000	1
2,3,7,8-TCDF	11.5 C	0.276	1.19	0.75	1.001	1
1,2,3,7,8-PeCDF	4.07	0.218	2.98	1.48	1.000	1
2,3,4,7,8-PeCDF	3.56	0.216	2.98	1.57	1.024	1
1,2,3,4,7,8-HxCDF	12.9	0.208	2.98	1.29	1.000	1
1,2,3,6,7,8-HxCDF	8.85	0.199	2.98	1.31	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.266	2.98			1
2,3,4,6,7,8-HxCDF	9.40	0.227	2.98	1.32	1.016	1
1,2,3,4,6,7,8-HpCDF	111	0.622	2.98	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	12.3	0.865	2.98	1.12	1.034	1
OCDF	377	0.148	5.97	0.88	1.004	1
Total Tetra-Dioxins	26.2	0.134	1.19	0.82		1
Total Penta-Dioxins	36.2	0.176	2.98	1.51		1
Total Hexa-Dioxins	102	0.192	2.98	1.32		1
Total Hepta-Dioxins	645	0.578	2.98	1.04		1
Total Tetra-Furans	77.9	0.276	1.19	0.80		1
Total Penta-Furans	112	0.216	2.98	1.59		1
Total Hexa-Furans	153	0.199	2.98	1.30		1
Total Hepta-Furans	299	0.622	2.98	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	Percent
Lab Code:	R0906411-002	Basis:	Dry
		Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2005
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-03
Data File Name:	P106032	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	692.339	69		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	706.458	71		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1642.549	66		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1591.313	64		40-135	1.07	1.068
13C-OCDD	5000	2454.907	49		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	676.894	68		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	750.407	75		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1757.972	70		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1609.099	64		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	662.067	83		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-02-110409
Lab Code: R0906411-002

Service Request: R0906411
Date Collected: 11/4/09 1022
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.18	0.134	1	1	1.18
1,2,3,7,8-PeCDD	2.54	0.176	1	1	2.54
1,2,3,4,7,8-HxCDD	3.23	0.211	1	0.1	0.323
1,2,3,6,7,8-HxCDD	11.2	0.192	1	0.1	1.12
1,2,3,7,8,9-HxCDD	7.63	0.203	1	0.1	0.763
1,2,3,4,6,7,8-HpCDD	293	0.578	1	0.01	2.93
OCDD	4430	0.214	1	0.0003	1.33
2,3,7,8-TCDF	5.94	0.0712	1	0.1	0.594
1,2,3,7,8-PeCDF	4.07	0.218	1	0.03	0.122
2,3,4,7,8-PeCDF	3.56	0.216	1	0.3	1.07
1,2,3,4,7,8-HxCDF	12.9	0.208	1	0.1	1.29
1,2,3,6,7,8-HxCDF	8.85	0.199	1	0.1	0.885
1,2,3,7,8,9-HxCDF	ND	0.266	1	0.1	
2,3,4,6,7,8-HxCDF	9.40	0.227	1	0.1	0.940
1,2,3,4,6,7,8-HpCDF	111	0.622	1	0.01	1.11
1,2,3,4,7,8,9-HpCDF	12.3	0.865	1	0.01	0.123
OCDF	377	0.148	1	0.0003	0.113

Total TEQ 16.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	ng/Kg
Lab Code:	R0906411-002	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0047
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-04
Data File Name:	P204970	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.94		0.0712	1.19	0.74	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	668.828	67		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	640.960	80		40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.299g
Data File Name: P106033
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2053
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.21 JK	0.0786	1.25	0.64	1.001	1
1,2,3,7,8-PeCDD	4.51 K	0.0924	3.12	1.84	1.000	1
1,2,3,4,7,8-HxCDD	10.4	0.0969	3.12	1.28	0.998	1
1,2,3,6,7,8-HxCDD	28.2	0.0879	3.12	1.26	1.000	1
1,2,3,7,8,9-HxCDD	27.6	0.0932	3.12	1.28	1.009	1
1,2,3,4,6,7,8-HpCDD	836 E	0.158	3.12	1.06	1.000	1
OCDD	7880 BE	0.235	6.24	0.90	1.000	1
2,3,7,8-TCDF	18.4 C	0.235	1.25	0.80	1.001	1
1,2,3,7,8-PeCDF	5.36	0.319	3.12	1.52	1.000	1
2,3,4,7,8-PeCDF	7.49	0.316	3.12	1.56	1.024	1
1,2,3,4,7,8-HxCDF	30.0	0.239	3.12	1.25	1.000	1
1,2,3,6,7,8-HxCDF	19.1	0.229	3.12	1.28	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.306	3.12			1
2,3,4,6,7,8-HxCDF	23.8	0.262	3.12	1.41	1.017	1
1,2,3,4,6,7,8-HpCDF	256	0.598	3.12	1.07	1.000	1
1,2,3,4,7,8,9-HpCDF	14.7	0.831	3.12	1.03	1.033	1
OCDF	612	0.166	6.24	0.91	1.004	1
Total Tetra-Dioxins	44.3	0.0786	1.25	0.81		1
Total Penta-Dioxins	36.9	0.0924	3.12	1.60		1
Total Hexa-Dioxins	306	0.0879	3.12	1.29		1
Total Hepta-Dioxins	1750	0.158	3.12	1.07		1
Total Tetra-Furans	111	0.235	1.25	0.81		1
Total Penta-Furans	185	0.316	3.12	1.59		1
Total Hexa-Furans	339	0.229	3.12	1.27		1
Total Hepta-Furans	608	0.598	3.12	1.07		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1059
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-03-110409	Units:	Percent
Lab Code:	R0906411-003	Basis:	Dry
		Percent Solids:	77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2053
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.299g	Instrument Name:	E-HRMS-03
Data File Name:	P106033	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	759.012	76		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	798.333	80		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1680.646	67		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1590.231	64		40-135	1.07	1.069
13C-OCDD	5000	2308.088	46		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	763.685	76		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	838.229	84		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1833.435	73		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1564.831	63		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	729.033	91		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.21	0.0786	1	1	1.21
1,2,3,7,8-PeCDD	4.51	0.0924	1	1	4.51
1,2,3,4,7,8-HxCDD	10.4	0.0969	1	0.1	1.04
1,2,3,6,7,8-HxCDD	28.2	0.0879	1	0.1	2.82
1,2,3,7,8,9-HxCDD	27.6	0.0932	1	0.1	2.76
1,2,3,4,6,7,8-HpCDD	836	0.158	1	0.01	8.36
OCDD	7880	0.235	1	0.0003	2.36
2,3,7,8-TCDF	4.44	0.107	1	0.1	0.444
1,2,3,7,8-PeCDF	5.36	0.319	1	0.03	0.161
2,3,4,7,8-PeCDF	7.49	0.316	1	0.3	2.25
1,2,3,4,7,8-HxCDF	30.0	0.239	1	0.1	3.00
1,2,3,6,7,8-HxCDF	19.1	0.229	1	0.1	1.91
1,2,3,7,8,9-HxCDF	ND	0.306	1	0.1	
2,3,4,6,7,8-HxCDF	23.8	0.262	1	0.1	2.38
1,2,3,4,6,7,8-HpCDF	256	0.598	1	0.01	2.56
1,2,3,4,7,8,9-HpCDF	14.7	0.831	1	0.01	0.147
OCDF	612	0.166	1	0.0003	0.184

Total TEQ 36.1

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.299g
Data File Name: P204971
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0124
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.44	0.107	1.25	0.84	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	748.828	75	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	705.656	88	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.339g
Data File Name: P106034
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2140
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	3.91	0.127	1.14	0.80	1.001	1
1,2,3,7,8-PeCDD	7.52	0.137	2.85	1.58	1.000	1
1,2,3,4,7,8-HxCDD	12.2	0.130	2.85	1.26	0.999	1
1,2,3,6,7,8-HxCDD	43.3	0.118	2.85	1.30	1.000	1
1,2,3,7,8,9-HxCDD	31.7	0.125	2.85	1.28	1.009	1
1,2,3,4,6,7,8-HpCDD	1290 E	1.57	2.85	1.06	1.001	1
OCDD	18500 BE	0.480	5.70	0.90	1.000	1
2,3,7,8-TCDF	34.8 C	0.353	1.14	0.75	1.001	1
1,2,3,7,8-PeCDF	11.6	0.402	2.85	1.46	1.001	1
2,3,4,7,8-PeCDF	16.2	0.397	2.85	1.53	1.025	1
1,2,3,4,7,8-HxCDF	51.2	0.321	2.85	1.23	1.000	1
1,2,3,6,7,8-HxCDF	29.8	0.307	2.85	1.16	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.411	2.85			1
2,3,4,6,7,8-HxCDF	35.1	0.351	2.85	1.13	1.017	1
1,2,3,4,6,7,8-HpCDF	369	0.561	2.85	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	33.2	0.781	2.85	1.05	1.034	1
OCDF	1440 E	0.217	5.70	0.90	1.004	1
Total Tetra-Dioxins	94.7	0.127	1.14	0.76		1
Total Penta-Dioxins	85.5	0.137	2.85	1.50		1
Total Hexa-Dioxins	392	0.118	2.85	1.27		1
Total Hepta-Dioxins	2960	1.57	2.85	1.04		1
Total Tetra-Furans	234	0.353	1.14	0.69		1
Total Penta-Furans	459	0.397	2.85	1.59		1
Total Hexa-Furans	604	0.307	2.85	1.25		1
Total Hepta-Furans	1110	0.561	2.85	1.02		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1126
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-04-110409	Units:	Percent
Lab Code:	R0906411-004	Basis:	Dry
		Percent Solids:	77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2140
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.339g	Instrument Name:	E-HRMS-03
Data File Name:	P106034	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	715.283	72		40-135	0.82	1.009
13C-1,2,3,7,8-PeCDD	1000	710.878	71		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1578.149	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1463.319	59		40-135	1.09	1.068
13C-OCDD	5000	1867.917	37	Y	40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.929	66		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	738.578	74		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1748.500	70		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1461.662	58		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	692.294	87		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	3.91	0.127	1	1	3.91
1,2,3,7,8-PeCDD	7.52	0.137	1	1	7.52
1,2,3,4,7,8-HxCDD	12.2	0.130	1	0.1	1.22
1,2,3,6,7,8-HxCDD	43.3	0.118	1	0.1	4.33
1,2,3,7,8,9-HxCDD	31.7	0.125	1	0.1	3.17
1,2,3,4,6,7,8-HpCDD	1290	1.57	1	0.01	12.9
OCDD	18500	0.480	1	0.0003	5.55
2,3,7,8-TCDF	16.8	0.147	1	0.1	1.68
1,2,3,7,8-PeCDF	11.6	0.402	1	0.03	0.348
2,3,4,7,8-PeCDF	16.2	0.397	1	0.3	4.86
1,2,3,4,7,8-HxCDF	51.2	0.321	1	0.1	5.12
1,2,3,6,7,8-HxCDF	29.8	0.307	1	0.1	2.98
1,2,3,7,8,9-HxCDF	ND	0.411	1	0.1	
2,3,4,6,7,8-HxCDF	35.1	0.351	1	0.1	3.51
1,2,3,4,6,7,8-HpCDF	369	0.561	1	0.01	3.69
1,2,3,4,7,8,9-HpCDF	33.2	0.781	1	0.01	0.332
OCDF	1440	0.217	1	0.0003	0.432

Total TEQ 61.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.339g
Data File Name: P204972
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0201
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	16.8	0.147	1.14	0.78	1.000	1	
Labeled Compounds		Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio
13C-2,3,7,8-TCDF		1000	665.754	67		40-135	0.75
37Cl-2,3,7,8-TCDD		800	673.339	84		40-135	NA
							0.985

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409	Units:	ng/Kg
Lab Code:	R0906411-005	Basis:	Dry
		Percent Solids:	79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2228
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.669g	Instrument Name:	E-HRMS-03
Data File Name:	P106035	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.711 J	0.132	1.18	0.66	1.001	1
1,2,3,7,8-PeCDD	1.70 J	0.119	2.94	1.49	1.000	1
1,2,3,4,7,8-HxCDD	3.03	0.173	2.94	1.24	0.998	1
1,2,3,6,7,8-HxCDD	8.05	0.157	2.94	1.32	1.000	1
1,2,3,7,8,9-HxCDD	5.92	0.166	2.94	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	257	0.474	2.94	1.03	1.000	1
OCDD	4020 BE	0.572	5.88	0.90	1.000	1
2,3,7,8-TCDF	6.20 C	0.172	1.18	0.79	1.001	1
1,2,3,7,8-PeCDF	2.18 J	0.136	2.94	1.77	1.001	1
2,3,4,7,8-PeCDF	3.03	0.134	2.94	1.64	1.025	1
1,2,3,4,7,8-HxCDF	8.05	0.654	2.94	1.29	1.000	1
1,2,3,6,7,8-HxCDF	4.31	0.625	2.94	1.22	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.838	2.94			1
2,3,4,6,7,8-HxCDF	3.96	0.716	2.94	1.35	1.017	1
1,2,3,4,6,7,8-HpCDF	60.7	0.338	2.94	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	6.47	0.470	2.94	1.18	1.033	1
OCDF	245	0.321	5.88	0.88	1.004	1
Total Tetra-Dioxins	17.2	0.132	1.18	0.79		1
Total Penta-Dioxins	21.5	0.119	2.94	1.56		1
Total Hexa-Dioxins	81.6	0.157	2.94	1.24		1
Total Hepta-Dioxins	620	0.474	2.94	1.05		1
Total Tetra-Furans	43.7	0.172	1.18	0.78		1
Total Penta-Furans	58.3	0.134	2.94	1.55		1
Total Hexa-Furans	84.2	0.625	2.94	1.28		1
Total Hepta-Furans	185	0.338	2.94	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409
Lab Code: R0906411-005
Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.669g
Data File Name: P106035
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2228
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	731.878	73		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	798.246	80		40-135	1.59	1.177
13C-1,2,3,6,7,8-HxCDD	2500	1757.805	70		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1737.654	70		40-135	1.05	1.068
13C-OCDD	5000	2558.429	51		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	775.682	78		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	847.873	85		40-135	1.63	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1951.970	78		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1736.593	69		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	704.592	88		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409
Lab Code: R0906411-005

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	0.711	0.132	1	1	0.711
1,2,3,7,8-PeCDD	1.70	0.119	1	1	1.70
1,2,3,4,7,8-HxCDD	3.03	0.173	1	0.1	0.303
1,2,3,6,7,8-HxCDD	8.05	0.157	1	0.1	0.805
1,2,3,7,8,9-HxCDD	5.92	0.166	1	0.1	0.592
1,2,3,4,6,7,8-HpCDD	257	0.474	1	0.01	2.57
OCDD	4020	0.572	1	0.0003	1.21
2,3,7,8-TCDF	2.29	0.0986	1	0.1	0.229
1,2,3,7,8-PeCDF	2.18	0.136	1	0.03	0.0654
2,3,4,7,8-PeCDF	3.03	0.134	1	0.3	0.909
1,2,3,4,7,8-HxCDF	8.05	0.654	1	0.1	0.805
1,2,3,6,7,8-HxCDF	4.31	0.625	1	0.1	0.431
1,2,3,7,8,9-HxCDF	ND	0.838	1	0.1	
2,3,4,6,7,8-HxCDF	3.96	0.716	1	0.1	0.396
1,2,3,4,6,7,8-HpCDF	60.7	0.338	1	0.01	0.607
1,2,3,4,7,8,9-HpCDF	6.47	0.470	1	0.01	0.0647
OCDF	245	0.321	1	0.0003	0.0735

Total TEQ 11.5

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-05-110409
Lab Code: R0906411-005
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.669g

Data File Name: P204973
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0238
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.29 K	0.0986	1.18	0.91	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	752.855	75	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	676.612	85	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409-D	Units:	ng/Kg
Lab Code:	R0906411-006	Basis:	Dry
		Percent Solids:	80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2316
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.211g	Instrument Name:	E-HRMS-03
Data File Name:	P106036	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.858 J	0.0915	1.22	0.76	1.001	1
1,2,3,7,8-PeCDD	1.90 J	0.107	3.05	1.66	1.000	1
1,2,3,4,7,8-HxCDD	3.09	0.174	3.05	1.23	0.998	1
1,2,3,6,7,8-HxCDD	10.1	0.158	3.05	1.30	1.000	1
1,2,3,7,8,9-HxCDD	7.62	0.167	3.05	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	302	0.738	3.05	1.05	1.000	1
OCDD	4690 BE	0.370	6.11	0.89	1.000	1
2,3,7,8-TCDF	6.70 C	0.305	1.22	0.75	1.001	1
1,2,3,7,8-PeCDF	2.36 J	0.193	3.05	1.71	1.001	1
2,3,4,7,8-PeCDF	2.72 J	0.191	3.05	1.68	1.025	1
1,2,3,4,7,8-HxCDF	9.01	0.192	3.05	1.25	1.000	1
1,2,3,6,7,8-HxCDF	5.31	0.184	3.05	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.246	3.05			1
2,3,4,6,7,8-HxCDF	6.24	0.210	3.05	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	71.6	0.770	3.05	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	7.29	1.08	3.05	1.05	1.034	1
OCDF	295	0.285	6.11	0.94	1.004	1
Total Tetra-Dioxins	21.2	0.0915	1.22	0.79		1
Total Penta-Dioxins	24.4	0.107	3.05	1.65		1
Total Hexa-Dioxins	97.3	0.158	3.05	1.22		1
Total Hepta-Dioxins	742	0.738	3.05	1.07		1
Total Tetra-Furans	42.4	0.305	1.22	0.70		1
Total Penta-Furans	70.6	0.191	3.05	1.60		1
Total Hexa-Furans	98.4	0.184	3.05	1.26		1
Total Hepta-Furans	222	0.770	3.05	1.03		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409-D	Units:	Percent
Lab Code:	R0906411-006	Basis:	Dry
		Percent Solids:	80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2316
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.211g	Instrument Name:	E-HRMS-03
Data File Name:	P106036	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	664.301	66		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	679.511	68		40-135	1.57	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1538.376	62		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1412.129	56		40-135	1.07	1.068
13C-OCDD	5000	2048.342	41		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.222	66		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	712.822	71		40-135	1.60	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1700.958	68		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1429.615	57		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	663.233	83		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006
Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	0.858	0.0915	1	1	0.858
1,2,3,7,8-PeCDD	1.90	0.107	1	1	1.90
1,2,3,4,7,8-HxCDD	3.09	0.174	1	0.1	0.309
1,2,3,6,7,8-HxCDD	10.1	0.158	1	0.1	1.01
1,2,3,7,8,9-HxCDD	7.62	0.167	1	0.1	0.762
1,2,3,4,6,7,8-HpCDD	302	0.738	1	0.01	3.02
OCDD	4690	0.370	1	0.0003	1.41
2,3,7,8-TCDF	2.72	0.0581	1	0.1	0.272
1,2,3,7,8-PeCDF	2.36	0.193	1	0.03	0.0708
2,3,4,7,8-PeCDF	2.72	0.191	1	0.3	0.816
1,2,3,4,7,8-HxCDF	9.01	0.192	1	0.1	0.901
1,2,3,6,7,8-HxCDF	5.31	0.184	1	0.1	0.531
1,2,3,7,8,9-HxCDF	ND	0.246	1	0.1	
2,3,4,6,7,8-HxCDF	6.24	0.210	1	0.1	0.624
1,2,3,4,6,7,8-HpCDF	71.6	0.770	1	0.01	0.716
1,2,3,4,7,8,9-HpCDF	7.29	1.08	1	0.01	0.0729
OCDF	295	0.285	1	0.0003	0.0885

Total TEQ

13.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.211g

Data File Name: P204974
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0314
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.72	0.0581	1.22	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	653.263	65		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	642.668	80		40-135	NA	0.987

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-06-110409
Lab Code: R0906411-007
Service Request: R0906411
Date Collected: 11/4/09 1350
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.293g
Data File Name: P106037
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0003
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.62	0.104	1.34	0.75	1.001	1
1,2,3,7,8-PeCDD	5.92	0.148	3.35	1.53	1.000	1
1,2,3,4,7,8-HxCDD	10.1	0.245	3.35	1.31	0.998	1
1,2,3,6,7,8-HxCDD	31.5	0.223	3.35	1.34	1.000	1
1,2,3,7,8,9-HxCDD	24.7	0.236	3.35	1.23	1.009	1
1,2,3,4,6,7,8-HpCDD	981 E	0.260	3.35	1.04	1.000	1
OCDD	37700 BE	0.374	6.70	0.90	1.000	1
2,3,7,8-TCDF	21.7 C	0.335	1.34	0.72	1.002	1
1,2,3,7,8-PeCDF	7.90	0.321	3.35	1.70	1.001	1
2,3,4,7,8-PeCDF	8.78	0.317	3.35	1.69	1.025	1
1,2,3,4,7,8-HxCDF	29.4	0.364	3.35	1.27	1.000	1
1,2,3,6,7,8-HxCDF	17.6	0.348	3.35	1.33	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.466	3.35			1
2,3,4,6,7,8-HxCDF	18.4	0.398	3.35	1.31	1.016	1
1,2,3,4,6,7,8-HpCDF	261	0.995	3.35	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	28.0	1.39	3.35	1.11	1.034	1
OCDF	1130	0.231	6.70	0.90	1.004	1
Total Tetra-Dioxins	87.5	0.104	1.34	0.78		1
Total Penta-Dioxins	70.5	0.148	3.35	1.58		1
Total Hexa-Dioxins	368	0.223	3.35	1.27		1
Total Hepta-Dioxins	2910	0.260	3.35	1.04		1
Total Tetra-Furans	77.9	0.335	1.34	0.87		1
Total Penta-Furans	177	0.317	3.35	1.64		1
Total Hexa-Furans	319	0.348	3.35	1.30		1
Total Hepta-Furans	780	0.995	3.35	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1350
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-06-110409	Units:	Percent
Lab Code:	R0906411-007	Basis:	Dry
		Percent Solids:	72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0003
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.293g	Instrument Name:	E-HRMS-03
Data File Name:	P106037	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	707.929	71		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	700.393	70		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1524.466	61		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1443.299	58		40-135	1.07	1.068
13C-OCDD	5000	1992.362	40		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	686.029	69		40-135	0.76	0.979
13C-1,2,3,7,8-PeCDF	1000	738.597	74		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1725.826	69		40-135	0.50	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1449.207	58		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	625.203	78		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-06-110409
Lab Code: R0906411-007

Service Request: R0906411
Date Collected: 11/4/09 1350
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.62	0.104	1	1	2.62
1,2,3,7,8-PeCDD	5.92	0.148	1	1	5.92
1,2,3,4,7,8-HxCDD	10.1	0.245	1	0.1	1.01
1,2,3,6,7,8-HxCDD	31.5	0.223	1	0.1	3.15
1,2,3,7,8,9-HxCDD	24.7	0.236	1	0.1	2.47
1,2,3,4,6,7,8-HpCDD	981	0.260	1	0.01	9.81
OCDD	37700	0.374	1	0.0003	11.3
2,3,7,8-TCDF	8.87	0.0796	1	0.1	0.887
1,2,3,7,8-PeCDF	7.90	0.321	1	0.03	0.237
2,3,4,7,8-PeCDF	8.78	0.317	1	0.3	2.63
1,2,3,4,7,8-HxCDF	29.4	0.364	1	0.1	2.94
1,2,3,6,7,8-HxCDF	17.6	0.348	1	0.1	1.76
1,2,3,7,8,9-HxCDF	ND	0.466	1	0.1	
2,3,4,6,7,8-HxCDF	18.4	0.398	1	0.1	1.84
1,2,3,4,6,7,8-HpCDF	261	0.995	1	0.01	2.61
1,2,3,4,7,8,9-HpCDF	28.0	1.39	1	0.01	0.280
OCDF	1130	0.231	1	0.0003	0.339

Total TEQ

49.8

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1350
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-06-110409	Units:	ng/Kg
Lab Code:	R0906411-007	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0351
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.293g	Instrument Name:	E-HRMS-04
Data File Name:	P204975	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.87		0.0796	1.34	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	645.521	65		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	627.873	78		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-07-110409
Lab Code: R0906411-008
Service Request: R0906411
Date Collected: 11/4/09 1408
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.331g
Data File Name: P106038
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0051
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.85	0.113	1.23	0.77	1.001	1
1,2,3,7,8-PeCDD	9.89	0.141	3.09	1.60	1.000	1
1,2,3,4,7,8-HxCDD	14.2	0.207	3.09	1.20	0.998	1
1,2,3,6,7,8-HxCDD	50.3	0.188	3.09	1.29	1.000	1
1,2,3,7,8,9-HxCDD	37.2	0.199	3.09	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	1560 E	5.71	3.09	1.06	1.000	1
OCDD	19800 BE	0.941	6.17	0.90	1.000	1
2,3,7,8-TCDF	33.3 C	0.634	1.23	0.78	1.001	1
1,2,3,7,8-PeCDF	14.2	0.404	3.09	1.57	1.000	1
2,3,4,7,8-PeCDF	14.7	0.400	3.09	1.62	1.024	1
1,2,3,4,7,8-HxCDF	59.8	0.245	3.09	1.26	1.000	1
1,2,3,6,7,8-HxCDF	32.6	0.234	3.09	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.314	3.09			1
2,3,4,6,7,8-HxCDF	39.1	0.268	3.09	1.33	1.016	1
1,2,3,4,6,7,8-HpCDF	479	0.426	3.09	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	81.2	0.593	3.09	1.04	1.033	1
OCDF	2700 E	0.311	6.17	0.90	1.004	1
Total Tetra-Dioxins	155	0.113	1.23	0.79		1
Total Penta-Dioxins	127	0.141	3.09	1.52		1
Total Hexa-Dioxins	542	0.188	3.09	1.25		1
Total Hepta-Dioxins	4200	5.71	3.09	1.05		1
Total Tetra-Furans	231	0.634	1.23	0.83		1
Total Penta-Furans	351	0.400	3.09	1.61		1
Total Hexa-Furans	646	0.234	3.09	1.25		1
Total Hepta-Furans	1670	0.426	3.09	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1408
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-07-110409	Units:	Percent
Lab Code:	R0906411-008	Basis:	Dry
		Percent Solids:	78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0051
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.331g	Instrument Name:	E-HRMS-03
Data File Name:	P106038	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	652.580	65		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	669.423	67		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1445.354	58		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1375.081	55		40-135	1.09	1.068
13C-OCDD	5000	1951.854	39	Y	40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	677.548	68		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	720.135	72		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1641.361	66		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1375.348	55		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	639.981	80		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-07-110409
Lab Code: R0906411-008
Service Request: R0906411
Date Collected: 11/4/09 1408
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.85	0.113	1	1	4.85
1,2,3,7,8-PeCDD	9.89	0.141	1	1	9.89
1,2,3,4,7,8-HxCDD	14.2	0.207	1	0.1	1.42
1,2,3,6,7,8-HxCDD	50.3	0.188	1	0.1	5.03
1,2,3,7,8,9-HxCDD	37.2	0.199	1	0.1	3.72
1,2,3,4,6,7,8-HpCDD	1560	5.71	1	0.01	15.6
OCDD	19800	0.941	1	0.0003	5.94
2,3,7,8-TCDF	13.1	0.144	1	0.1	1.31
1,2,3,7,8-PeCDF	14.2	0.404	1	0.03	0.426
2,3,4,7,8-PeCDF	14.7	0.400	1	0.3	4.41
1,2,3,4,7,8-HxCDF	59.8	0.245	1	0.1	5.98
1,2,3,6,7,8-HxCDF	32.6	0.234	1	0.1	3.26
1,2,3,7,8,9-HxCDF	ND	0.314	1	0.1	
2,3,4,6,7,8-HxCDF	39.1	0.268	1	0.1	3.91
1,2,3,4,6,7,8-HpCDF	479	0.426	1	0.01	4.79
1,2,3,4,7,8,9-HpCDF	81.2	0.593	1	0.01	0.812
OCDF	2700	0.311	1	0.0003	0.810

Total TEQ 72.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1408
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-07-110409	Units:	ng/Kg
Lab Code:	R0906411-008	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0428
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.331g	Instrument Name:	E-HRMS-04
Data File Name:	P204976	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	13.1	0.144	1.23	0.83	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	679.222	68		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	639.735	80		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1429
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-08-110409	Units:	ng/Kg
Lab Code:	R0906411-009	Basis:	Dry
		Percent Solids:	82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0139
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.115g	Instrument Name:	E-HRMS-03
Data File Name:	P106039	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.28	0.0730	1.10	0.79	1.001	1
1,2,3,7,8-PeCDD	7.28	0.0707	2.74	1.53	1.000	1
1,2,3,4,7,8-HxCDD	13.9	0.123	2.74	1.20	0.998	1
1,2,3,6,7,8-HxCDD	35.6	0.112	2.74	1.28	1.000	1
1,2,3,7,8,9-HxCDD	36.2	0.118	2.74	1.33	1.009	1
1,2,3,4,6,7,8-HpCDD	1620 E	4.16	2.74	1.06	1.000	1
OCDD	18700 BE	0.538	5.48	0.90	1.000	1
2,3,7,8-TCDF	15.8 C	0.187	1.10	0.80	1.001	1
1,2,3,7,8-PeCDF	6.12	0.231	2.74	1.58	1.000	1
2,3,4,7,8-PeCDF	8.20	0.229	2.74	1.63	1.024	1
1,2,3,4,7,8-HxCDF	26.8	0.208	2.74	1.30	1.000	1
1,2,3,6,7,8-HxCDF	14.5	0.198	2.74	1.30	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.266	2.74			1
2,3,4,6,7,8-HxCDF	19.6	0.227	2.74	1.29	1.016	1
1,2,3,4,6,7,8-HpCDF	296	0.381	2.74	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	28.5	0.530	2.74	1.02	1.034	1
OCDF	1400 E	0.240	5.48	0.90	1.004	1
Total Tetra-Dioxins	41.2	0.0730	1.10	0.83		1
Total Penta-Dioxins	91.9	0.0707	2.74	1.62		1
Total Hexa-Dioxins	901	0.112	2.74	1.25		1
Total Hepta-Dioxins	7800	4.16	2.74	1.05		1
Total Tetra-Furans	80.4	0.187	1.10	0.75		1
Total Penta-Furans	144	0.229	2.74	1.60		1
Total Hexa-Furans	350	0.198	2.74	1.27		1
Total Hepta-Furans	988	0.381	2.74	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1429
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-08-110409	Units:	Percent
Lab Code:	R0906411-009	Basis:	Dry
		Percent Solids:	82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0139
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.115g	Instrument Name:	E-HRMS-03
Data File Name:	P106039	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	712.863	71		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	733.959	73		40-135	1.59	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1564.475	63		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1527.789	61		40-135	1.05	1.068
13C-OCDD	5000	2161.523	43		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	735.452	74		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	772.858	77		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1841.570	74		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1526.542	61		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	676.660	85		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-08-110409
Lab Code: R0906411-009
Service Request: R0906411
Date Collected: 11/4/09 1429
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.28	0.0730	1	1	2.28
1,2,3,7,8-PeCDD	7.28	0.0707	1	1	7.28
1,2,3,4,7,8-HxCDD	13.9	0.123	1	0.1	1.39
1,2,3,6,7,8-HxCDD	35.6	0.112	1	0.1	3.56
1,2,3,7,8,9-HxCDD	36.2	0.118	1	0.1	3.62
1,2,3,4,6,7,8-HpCDD	1620	4.16	1	0.01	16.2
OCDD	18700	0.538	1	0.0003	5.61
2,3,7,8-TCDF	5.93	0.0970	1	0.1	0.593
1,2,3,7,8-PeCDF	6.12	0.231	1	0.03	0.184
2,3,4,7,8-PeCDF	8.20	0.229	1	0.3	2.46
1,2,3,4,7,8-HxCDF	26.8	0.208	1	0.1	2.68
1,2,3,6,7,8-HxCDF	14.5	0.198	1	0.1	1.45
1,2,3,7,8,9-HxCDF	ND	0.266	1	0.1	
2,3,4,6,7,8-HxCDF	19.6	0.227	1	0.1	1.96
1,2,3,4,6,7,8-HpCDF	296	0.381	1	0.01	2.96
1,2,3,4,7,8,9-HpCDF	28.5	0.530	1	0.01	0.285
OCDF	1400	0.240	1	0.0003	0.420

Total TEQ 52.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-08-110409
Lab Code: R0906411-009
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1429
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.115g

Data File Name: P204977
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0505
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.93	0.0970	1.10	0.86	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	694.112	69		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	691.140	86		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-09-110409	Units:	ng/Kg
Lab Code:	R0906411-010	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0226
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.343g	Instrument Name:	E-HRMS-03
Data File Name:	P106040	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.129	1.26			1
1,2,3,7,8-PeCDD	1.36 J	0.106	3.15	1.75	1.000	1
1,2,3,4,7,8-HxCDD	2.69 J	0.319	3.15	1.13	0.998	1
1,2,3,6,7,8-HxCDD	7.28	0.290	3.15	1.23	1.000	1
1,2,3,7,8,9-HxCDD	5.83	0.307	3.15	1.37	1.009	1
1,2,3,4,6,7,8-HpCDD	236	1.93	3.15	1.09	1.000	1
OCDD	3660 BE	1.34	6.30	0.89	1.000	1
2,3,7,8-TCDF	3.25 C	0.179	1.26	0.86	1.001	1
1,2,3,7,8-PeCDF	1.75 J	0.136	3.15	1.77	1.000	1
2,3,4,7,8-PeCDF	1.94 J	0.134	3.15	1.46	1.025	1
1,2,3,4,7,8-HxCDF	8.33	0.218	3.15	1.35	1.000	1
1,2,3,6,7,8-HxCDF	3.77	0.208	3.15	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.279	3.15			1
2,3,4,6,7,8-HxCDF	4.37	0.238	3.15	1.16	1.017	1
1,2,3,4,6,7,8-HpCDF	52.8	0.320	3.15	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	4.53	0.445	3.15	1.09	1.034	1
OCDF	205	0.463	6.30	0.91	1.004	1
Total Tetra-Dioxins	6.28	0.129	1.26	0.81		1
Total Penta-Dioxins	10.1	0.106	3.15	1.52		1
Total Hexa-Dioxins	109	0.290	3.15	1.27		1
Total Hepta-Dioxins	878	1.93	3.15	1.07		1
Total Tetra-Furans	13.3	0.179	1.26	0.74		1
Total Penta-Furans	30.8	0.134	3.15	1.67		1
Total Hexa-Furans	64.8	0.208	3.15	1.11		1
Total Hepta-Furans	151	0.320	3.15	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-09-110409	Units:	Percent
Lab Code:	R0906411-010	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0226
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.343g	Instrument Name:	E-HRMS-03
Data File Name:	P106040	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	658.528	66		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	705.182	71		40-135	1.51	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1722.926	69		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1432.122	57		40-135	1.06	1.068
13C-OCDD	5000	1676.240	34	Y	40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	671.386	67		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1000	722.348	72		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1951.063	78		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1469.202	59		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	630.827	79		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-09-110409
Lab Code: R0906411-010

Service Request: R0906411
Date Collected: 11/4/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.129	1	1	
1,2,3,7,8-PeCDD	1.36	0.106	1	1	1.36
1,2,3,4,7,8-HxCDD	2.69	0.319	1	0.1	0.269
1,2,3,6,7,8-HxCDD	7.28	0.290	1	0.1	0.728
1,2,3,7,8,9-HxCDD	5.83	0.307	1	0.1	0.583
1,2,3,4,6,7,8-HpCDD	236	1.93	1	0.01	2.36
OCDD	3660	1.34	1	0.0003	1.10
2,3,7,8-TCDF	1.45	0.0951	1	0.1	0.145
1,2,3,7,8-PeCDF	1.75	0.136	1	0.03	0.0525
2,3,4,7,8-PeCDF	1.94	0.134	1	0.3	0.582
1,2,3,4,7,8-HxCDF	8.33	0.218	1	0.1	0.833
1,2,3,6,7,8-HxCDF	3.77	0.208	1	0.1	0.377
1,2,3,7,8,9-HxCDF	ND	0.279	1	0.1	
2,3,4,6,7,8-HxCDF	4.37	0.238	1	0.1	0.437
1,2,3,4,6,7,8-HpCDF	52.8	0.320	1	0.01	0.528
1,2,3,4,7,8,9-HpCDF	4.53	0.445	1	0.01	0.0453
OCDF	205	0.463	1	0.0003	0.0615

Total TEQ

9.46

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-09-110409
Lab Code: R0906411-010
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.343g
Data File Name: P204978
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0541
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	1.45	0.0951	1.26	0.88	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	694.770	69	40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	651.622	81	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1620
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-10-110409	Units:	ng/Kg
Lab Code:	R0906411-011	Basis:	Dry
		Percent Solids:	75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0314
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.568g	Instrument Name:	E-HRMS-03
Data File Name:	P106041	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.12	0.0842	1.26	0.82	1.001	1
1,2,3,7,8-PeCDD	8.23	0.135	3.15	1.54	1.000	1
1,2,3,4,7,8-HxCDD	12.6	0.199	3.15	1.29	0.998	1
1,2,3,6,7,8-HxCDD	40.4	0.181	3.15	1.23	1.000	1
1,2,3,7,8,9-HxCDD	28.4	0.192	3.15	1.24	1.008	1
1,2,3,4,6,7,8-HpCDD	1190 E	1.94	3.15	1.05	1.000	1
OCDD	17200 BE	0.710	6.29	0.90	1.000	1
2,3,7,8-TCDF	31.1 C	0.274	1.26	0.77	1.001	1
1,2,3,7,8-PeCDF	9.37	0.185	3.15	1.58	1.001	1
2,3,4,7,8-PeCDF	13.3	0.183	3.15	1.58	1.025	1
1,2,3,4,7,8-HxCDF	35.8	0.241	3.15	1.22	1.000	1
1,2,3,6,7,8-HxCDF	18.4	0.231	3.15	1.29	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.309	3.15			1
2,3,4,6,7,8-HxCDF	15.6	0.264	3.15	1.20	1.017	1
1,2,3,4,6,7,8-HpCDF	306	1.22	3.15	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	30.3	1.70	3.15	1.07	1.034	1
OCDF	1410 E	0.370	6.29	0.91	1.004	1
Total Tetra-Dioxins	148	0.0842	1.26	0.78		1
Total Penta-Dioxins	108	0.135	3.15	1.50		1
Total Hexa-Dioxins	459	0.181	3.15	1.27		1
Total Hepta-Dioxins	3260	1.94	3.15	1.05		1
Total Tetra-Furans	184	0.274	1.26	0.75		1
Total Penta-Furans	217	0.183	3.15	1.61		1
Total Hexa-Furans	395	0.231	3.15	1.28		1
Total Hepta-Furans	995	1.22	3.15	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1620
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-10-110409	Units:	Percent
Lab Code:	R0906411-011	Basis:	Dry
		Percent Solids:	75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0314
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.568g	Instrument Name:	E-HRMS-03
Data File Name:	P106041	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	685.120	69		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	733.631	73		40-135	1.58	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1468.450	59		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1377.375	55		40-135	1.05	1.068
13C-OCDD	5000	1727.234	35	Y	40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	721.351	72		40-135	0.76	0.979
13C-1,2,3,7,8-PeCDF	1000	785.581	79		40-135	1.57	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1716.705	69		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1384.614	55		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	679.078	85		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-10-110409
Lab Code: R0906411-011
Service Request: R0906411
Date Collected: 11/4/09 1620
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	9.12	0.0842	1	1	9.12
1,2,3,7,8-PeCDD	8.23	0.135	1	1	8.23
1,2,3,4,7,8-HxCDD	12.6	0.199	1	0.1	1.26
1,2,3,6,7,8-HxCDD	40.4	0.181	1	0.1	4.04
1,2,3,7,8,9-HxCDD	28.4	0.192	1	0.1	2.84
1,2,3,4,6,7,8-HpCDD	1190	1.94	1	0.01	11.9
OCDD	17200	0.710	1	0.0003	5.16
2,3,7,8-TCDF	10.5	0.124	1	0.1	1.05
1,2,3,7,8-PeCDF	9.37	0.185	1	0.03	0.281
2,3,4,7,8-PeCDF	13.3	0.183	1	0.3	3.99
1,2,3,4,7,8-HxCDF	35.8	0.241	1	0.1	3.58
1,2,3,6,7,8-HxCDF	18.4	0.231	1	0.1	1.84
1,2,3,7,8,9-HxCDF	ND	0.309	1	0.1	
2,3,4,6,7,8-HxCDF	15.6	0.264	1	0.1	1.56
1,2,3,4,6,7,8-HpCDF	306	1.22	1	0.01	3.06
1,2,3,4,7,8,9-HpCDF	30.3	1.70	1	0.01	0.303
OCDF	1410	0.370	1	0.0003	0.423

Total TEQ 58.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-10-110409
Lab Code: R0906411-011
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1620
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.568g
Data File Name: P204979
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0618
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	10.5	0.124	1.26	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	712.877	71		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	673.379	84		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P106047
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0922
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.77	0.138	1.23	0.66	1.000	1
1,2,3,7,8-PeCDD	8.26	0.165	3.07	1.71	1.000	1
1,2,3,4,7,8-HxCDD	16.5	0.265	3.07	1.30	0.998	1
1,2,3,6,7,8-HxCDD	37.2	0.187	3.07	1.30	1.000	1
1,2,3,7,8,9-HxCDD	32.2	0.234	3.07	1.24	1.009	1
1,2,3,4,6,7,8-HpCDD	1140 E	1.33	3.07	1.04	1.000	1
OCDD	10700 BE	0.261	6.14	0.90	1.000	1
2,3,7,8-TCDF	17.9 C	0.386	1.23	0.79	1.001	1
1,2,3,7,8-PeCDF	6.11	0.302	3.07	1.41	1.000	1
2,3,4,7,8-PeCDF	6.26	0.294	3.07	1.49	1.024	1
1,2,3,4,7,8-HxCDF	31.7	0.564	3.07	1.33	1.000	1
1,2,3,6,7,8-HxCDF	12.7	0.435	3.07	1.18	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.764	3.07			1
2,3,4,6,7,8-HxCDF	18.2	0.555	3.07	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	244	0.597	3.07	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	28.1	0.976	3.07	1.11	1.034	1
OCDF	925	0.137	6.14	0.90	1.004	1
Total Tetra-Dioxins	101	0.138	1.23	0.80		1
Total Penta-Dioxins	147	0.165	3.07	1.49		1
Total Hexa-Dioxins	345	0.187	3.07	1.25		1
Total Hepta-Dioxins	2290	1.33	3.07	1.05		1
Total Tetra-Furans	136	0.386	1.23	0.77		1
Total Penta-Furans	147	0.294	3.07	1.63		1
Total Hexa-Furans	304	0.435	3.07	1.25		1
Total Hepta-Furans	865	0.597	3.07	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P106047
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0922
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	726.174	73		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	640.323	64		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1844.279	74		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1739.246	70		40-135	1.07	1.068
13C-OCDD	5000	3050.152	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.366	66		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	755.217	76		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1798.771	72		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1563.207	63		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	683.247	85		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.77	0.138	1	1	2.77
1,2,3,7,8-PeCDD	8.26	0.165	1	1	8.26
1,2,3,4,7,8-HxCDD	16.5	0.265	1	0.1	1.65
1,2,3,6,7,8-HxCDD	37.2	0.187	1	0.1	3.72
1,2,3,7,8,9-HxCDD	32.2	0.234	1	0.1	3.22
1,2,3,4,6,7,8-HpCDD	1140	1.33	1	0.01	11.4
OCDD	10700	0.261	1	0.0003	3.21
2,3,7,8-TCDF	6.21	0.141	1	0.1	0.621
1,2,3,7,8-PeCDF	6.11	0.302	1	0.03	0.183
2,3,4,7,8-PeCDF	6.26	0.294	1	0.3	1.88
1,2,3,4,7,8-HxCDF	31.7	0.564	1	0.1	3.17
1,2,3,6,7,8-HxCDF	12.7	0.435	1	0.1	1.27
1,2,3,7,8,9-HxCDF	ND	0.764	1	0.1	
2,3,4,6,7,8-HxCDF	18.2	0.555	1	0.1	1.82
1,2,3,4,6,7,8-HpCDF	244	0.597	1	0.01	2.44
1,2,3,4,7,8,9-HpCDF	28.1	0.976	1	0.01	0.281
OCDF	925	0.137	1	0.0003	0.278

Total TEQ 46.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P204980
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0655
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	6.21	0.141	1.23	0.76	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	600.170	60		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	651.734	81		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: R0906411-013
Service Request: R0906411
Date Collected: 11/5/09 1715
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.955g
Data File Name: P106048
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1010
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.00	0.101	1.16	0.75	1.001	1
1,2,3,7,8-PeCDD	10.6	0.152	2.89	1.56	1.000	1
1,2,3,4,7,8-HxCDD	24.3	0.132	2.89	1.23	0.998	1
1,2,3,6,7,8-HxCDD	57.9	0.0928	2.89	1.27	1.000	1
1,2,3,7,8,9-HxCDD	46.0	0.117	2.89	1.17	1.009	1
1,2,3,4,6,7,8-HpCDD	2370 E	0.216	2.89	1.05	1.000	1
OCDD	28700 BE	0.443	5.78	0.90	1.000	1
2,3,7,8-TCDF	29.2 C	0.155	1.16	0.78	1.001	1
1,2,3,7,8-PeCDF	6.91	0.508	2.89	1.73	1.001	1
2,3,4,7,8-PeCDF	8.83	0.496	2.89	1.71	1.025	1
1,2,3,4,7,8-HxCDF	40.4	0.687	2.89	1.23	1.000	1
1,2,3,6,7,8-HxCDF	13.5 K	0.530	2.89	1.47	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.931	2.89			1
2,3,4,6,7,8-HxCDF	25.0	0.676	2.89	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	516	2.42	2.89	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	38.0	3.96	2.89	1.01	1.034	1
OCDF	2210 E	0.171	5.78	0.90	1.004	1
Total Tetra-Dioxins	187	0.101	1.16	0.78		1
Total Penta-Dioxins	110	0.152	2.89	1.45		1
Total Hexa-Dioxins	458	0.0928	2.89	1.26		1
Total Hepta-Dioxins	5030	0.216	2.89	1.04		1
Total Tetra-Furans	179	0.155	1.16	0.84		1
Total Penta-Furans	177	0.496	2.89	1.61		1
Total Hexa-Furans	488	0.530	2.89	1.34		1
Total Hepta-Furans	1900	2.42	2.89	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1715
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-12-110409	Units:	Percent
Lab Code:	R0906411-013	Basis:	Dry
		Percent Solids:	72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1010
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.955g	Instrument Name:	E-HRMS-03
Data File Name:	P106048	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	794.473	79		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	775.789	78		40-135	1.53	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1884.717	75		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1728.732	69		40-135	1.07	1.068
13C-OCDD	5000	2812.176	56		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	725.581	73		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	885.507	89		40-135	1.57	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1910.730	76		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1529.459	61		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	736.716	92		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: R0906411-013
Service Request: R0906411
Date Collected: 11/5/09 1715
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.00	0.101	1	1	7.00
1,2,3,7,8-PeCDD	10.6	0.152	1	1	10.6
1,2,3,4,7,8-HxCDD	24.3	0.132	1	0.1	2.43
1,2,3,6,7,8-HxCDD	57.9	0.0928	1	0.1	5.79
1,2,3,7,8,9-HxCDD	46.0	0.117	1	0.1	4.60
1,2,3,4,6,7,8-HpCDD	2370	0.216	1	0.01	23.7
OCDD	28700	0.443	1	0.0003	8.61
2,3,7,8-TCDF	8.92	0.143	1	0.1	0.892
1,2,3,7,8-PeCDF	6.91	0.508	1	0.03	0.207
2,3,4,7,8-PeCDF	8.83	0.496	1	0.3	2.65
1,2,3,4,7,8-HxCDF	40.4	0.687	1	0.1	4.04
1,2,3,6,7,8-HxCDF	13.5	0.530	1	0.1	1.35
1,2,3,7,8,9-HxCDF	ND	0.931	1	0.1	
2,3,4,6,7,8-HxCDF	25.0	0.676	1	0.1	2.50
1,2,3,4,6,7,8-HpCDF	516	2.42	1	0.01	5.16
1,2,3,4,7,8,9-HpCDF	38.0	3.96	1	0.01	0.380
OCDF	2210	0.171	1	0.0003	0.663

Total TEQ 80.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1715
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-12-110409	Units:	ng/Kg
Lab Code:	R0906411-013	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0951
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.955g	Instrument Name:	E-HRMS-04
Data File Name:	P204984	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204983
		Cal Ver. File Name:	P204981

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.92		0.143	1.16	0.81	1.000	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	710.743	71		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	733.698	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Service Request: R0906411
Date Collected: 11/5/09 0841
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.463g
Data File Name: P106049
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1057
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.28	0.120	1.25	0.79	1.001	1
1,2,3,7,8-PeCDD	7.82	0.106	3.12	1.42	1.000	1
1,2,3,4,7,8-HxCDD	12.7	0.170	3.12	1.25	0.998	1
1,2,3,6,7,8-HxCDD	22.8	0.120	3.12	1.26	1.000	1
1,2,3,7,8,9-HxCDD	21.4	0.151	3.12	1.18	1.008	1
1,2,3,4,6,7,8-HpCDD	722 E	0.782	3.12	1.05	1.000	1
OCDD	6440 BE	0.819	6.25	0.90	1.000	1
2,3,7,8-TCDF	28.4 C	0.252	1.25	0.82	1.001	1
1,2,3,7,8-PeCDF	12.3	0.411	3.12	1.66	1.001	1
2,3,4,7,8-PeCDF	10.9	0.401	3.12	1.58	1.025	1
1,2,3,4,7,8-HxCDF	40.7	0.175	3.12	1.28	1.000	1
1,2,3,6,7,8-HxCDF	19.6	0.135	3.12	1.25	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.237	3.12			1
2,3,4,6,7,8-HxCDF	14.6	0.172	3.12	1.15	1.017	1
1,2,3,4,6,7,8-HpCDF	240	0.563	3.12	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	38.5	0.922	3.12	1.00	1.034	1
OCDF	828	0.277	6.25	0.90	1.004	1
Total Tetra-Dioxins	132	0.120	1.25	0.77		1
Total Penta-Dioxins	118	0.106	3.12	1.61		1
Total Hexa-Dioxins	240	0.120	3.12	1.26		1
Total Hepta-Dioxins	1360	0.782	3.12	1.04		1
Total Tetra-Furans	203	0.252	1.25	0.80		1
Total Penta-Furans	207	0.401	3.12	1.62		1
Total Hexa-Furans	341	0.135	3.12	1.24		1
Total Hepta-Furans	708	0.563	3.12	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0841
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-13-110509	Units:	Percent
Lab Code:	R0906411-014	Basis:	Dry
		Percent Solids:	69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1057
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.463g	Instrument Name:	E-HRMS-03
Data File Name:	P106049	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	744.328	74		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	749.152	75		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1623.952	65		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1484.742	59		40-135	1.06	1.068
13C-OCDD	5000	2455.776	49		40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	719.149	72		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	825.440	83		40-135	1.59	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1611.507	64		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1269.154	51		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	721.271	90		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Service Request: R0906411
Date Collected: 11/ 5/09 0841
Date Received: 11/ 7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.28	0.120	1	1	2.28
1,2,3,7,8-PeCDD	7.82	0.106	1	1	7.82
1,2,3,4,7,8-HxCDD	12.7	0.170	1	0.1	1.27
1,2,3,6,7,8-HxCDD	22.8	0.120	1	0.1	2.28
1,2,3,7,8,9-HxCDD	21.4	0.151	1	0.1	2.14
1,2,3,4,6,7,8-HpCDD	722	0.782	1	0.01	7.22
OCDD	6440	0.819	1	0.0003	1.93
2,3,7,8-TCDF	10.7	0.148	1	0.1	1.07
1,2,3,7,8-PeCDF	12.3	0.411	1	0.03	0.369
2,3,4,7,8-PeCDF	10.9	0.401	1	0.3	3.27
1,2,3,4,7,8-HxCDF	40.7	0.175	1	0.1	4.07
1,2,3,6,7,8-HxCDF	19.6	0.135	1	0.1	1.96
1,2,3,7,8,9-HxCDF	ND	0.237	1	0.1	
2,3,4,6,7,8-HxCDF	14.6	0.172	1	0.1	1.46
1,2,3,4,6,7,8-HpCDF	240	0.563	1	0.01	2.40
1,2,3,4,7,8,9-HpCDF	38.5	0.922	1	0.01	0.385
OCDF	828	0.277	1	0.0003	0.248

Total TEQ 40.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0841
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.463g
Data File Name: P204985
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1027
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	10.7	0.148	1.25	0.77	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	730.408	73		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	700.023	88		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0917
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-14-110509	Units:	ng/Kg
Lab Code:	R0906411-015	Basis:	Dry
		Percent Solids:	77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1145
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.135g	Instrument Name:	E-HRMS-03
Data File Name:	P106050	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.98	0.116	1.28	0.72	1.001	1
1,2,3,7,8-PeCDD	3.44	0.141	3.20	1.77	1.000	1
1,2,3,4,7,8-HxCDD	5.83	0.233	3.20	1.22	0.998	1
1,2,3,6,7,8-HxCDD	19.9	0.164	3.20	1.26	1.000	1
1,2,3,7,8,9-HxCDD	11.9	0.206	3.20	1.24	1.009	1
1,2,3,4,6,7,8-HpCDD	654 E	1.12	3.20	1.02	1.000	1
OCDD	12000 BE	0.322	6.39	0.90	1.000	1
2,3,7,8-TCDF	16.0 C	0.317	1.28	0.74	1.001	1
1,2,3,7,8-PeCDF	3.79	0.467	3.20	1.70	1.001	1
2,3,4,7,8-PeCDF	4.65	0.455	3.20	1.55	1.025	1
1,2,3,4,7,8-HxCDF	19.2	0.388	3.20	1.26	1.000	1
1,2,3,6,7,8-HxCDF	6.36	0.299	3.20	1.36	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.525	3.20			1
2,3,4,6,7,8-HxCDF	11.6	0.381	3.20	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	157	0.893	3.20	1.09	1.000	1
1,2,3,4,7,8,9-HpCDF	15.1	1.47	3.20	1.09	1.034	1
OCDF	404	0.140	6.39	0.90	1.004	1
Total Tetra-Dioxins	25.0	0.116	1.28	0.81		1
Total Penta-Dioxins	42.5	0.141	3.20	1.46		1
Total Hexa-Dioxins	172	0.164	3.20	1.25		1
Total Hepta-Dioxins	1350	1.12	3.20	1.06		1
Total Tetra-Furans	86.7	0.317	1.28	0.87		1
Total Penta-Furans	123	0.455	3.20	1.57		1
Total Hexa-Furans	226	0.299	3.20	1.28		1
Total Hepta-Furans	578	0.893	3.20	1.09		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015
Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.135g
Data File Name: P106050
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1145
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	788.498	79		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	746.257	75		40-135	1.53	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1918.164	77		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1760.357	70		40-135	1.09	1.068
13C-OCDD	5000	3069.418	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	718.077	72		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	815.368	82		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	2042.833	82		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1517.850	61		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	740.266	93		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015

Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.98	0.116	1	1	1.98
1,2,3,7,8-PeCDD	3.44	0.141	1	1	3.44
1,2,3,4,7,8-HxCDD	5.83	0.233	1	0.1	0.583
1,2,3,6,7,8-HxCDD	19.9	0.164	1	0.1	1.99
1,2,3,7,8,9-HxCDD	11.9	0.206	1	0.1	1.19
1,2,3,4,6,7,8-HpCDD	654	1.12	1	0.01	6.54
OCDD	12000	0.322	1	0.0003	3.60
2,3,7,8-TCDF	5.55	0.0739	1	0.1	0.555
1,2,3,7,8-PeCDF	3.79	0.467	1	0.03	0.114
2,3,4,7,8-PeCDF	4.65	0.455	1	0.3	1.40
1,2,3,4,7,8-HxCDF	19.2	2.66	1	0.1	1.92
1,2,3,6,7,8-HxCDF	6.36	2.05	1	0.1	0.636
1,2,3,7,8,9-HxCDF	ND	3.60	1	0.1	
2,3,4,6,7,8-HxCDF	11.6	2.61	1	0.1	1.16
1,2,3,4,6,7,8-HpCDF	157	0.893	1	0.01	1.57
1,2,3,4,7,8,9-HpCDF	15.1	1.47	1	0.01	0.151
OCDF	404	0.140	1	0.0003	0.121

Total TEQ 27.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.135g
Data File Name: P204986
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1104
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.55	0.0739	1.28	0.75	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	758.323	76	40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	715.347	89	40-135	NA	0.985

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-15-110509	Units:	ng/Kg
Lab Code:	R0906411-016	Basis:	Dry
		Percent Solids:	68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1233
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.016g	Instrument Name:	E-HRMS-03
Data File Name:	P106051	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	13.9	0.106	1.46	0.79	1.001	1
1,2,3,7,8-PeCDD	27.6	0.167	3.65	1.65	1.000	1
1,2,3,4,7,8-HxCDD	46.8	0.640	3.65	1.27	0.998	1
1,2,3,6,7,8-HxCDD	104	0.452	3.65	1.29	1.000	1
1,2,3,7,8,9-HxCDD	94.0	0.566	3.65	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	3240 E	2.61	3.65	1.04	1.000	1
OCDD	37000 BE	0.708	7.31	0.90	1.000	1
2,3,7,8-TCDF	158 C	0.419	1.46	0.81	1.001	1
1,2,3,7,8-PeCDF	44.4	1.05	3.65	1.64	1.001	1
2,3,4,7,8-PeCDF	53.9	1.02	3.65	1.58	1.025	1
1,2,3,4,7,8-HxCDF	210	0.685	3.65	1.27	1.000	1
1,2,3,6,7,8-HxCDF	81.6	0.528	3.65	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.928	3.65			1
2,3,4,6,7,8-HxCDF	66.0	0.674	3.65	1.39	1.017	1
1,2,3,4,6,7,8-HpCDF	1200 E	2.45	3.65	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	140	4.01	3.65	1.06	1.033	1
OCDF	3520 E	0.326	7.31	0.92	1.004	1
Total Tetra-Dioxins	358	0.106	1.46	0.77		1
Total Penta-Dioxins	352	0.167	3.65	1.56		1
Total Hexa-Dioxins	964	0.452	3.65	1.28		1
Total Hepta-Dioxins	6520	2.61	3.65	1.03		1
Total Tetra-Furans	995	0.419	1.46	0.79		1
Total Penta-Furans	959	1.02	3.65	1.58		1
Total Hexa-Furans	1280	0.528	3.65	1.26		1
Total Hepta-Furans	3840	2.45	3.65	1.03		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-15-110509	Units:	Percent
Lab Code:	R0906411-016	Basis:	Dry
		Percent Solids:	68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1233
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.016g	Instrument Name:	E-HRMS-03
Data File Name:	P106051	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	769.500	77		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1000	771.969	77		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1702.299	68		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1660.202	66		40-135	1.04	1.068
13C-OCDD	5000	2581.106	52		40-135	0.86	1.149
13C-2,3,7,8-TCDF	1000	722.449	72		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	859.327	86		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1779.506	71		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1419.638	57		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	679.842	85		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: R0906411-016
Service Request: R0906411
Date Collected: 11/5/09 0958
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	13.9	0.106	1	1	13.9
1,2,3,7,8-PeCDD	27.6	0.167	1	1	27.6
1,2,3,4,7,8-HxCDD	46.8	0.640	1	0.1	4.68
1,2,3,6,7,8-HxCDD	104	0.452	1	0.1	10.4
1,2,3,7,8,9-HxCDD	94.0	0.566	1	0.1	9.40
1,2,3,4,6,7,8-HpCDD	3240	2.61	1	0.01	32.4
OCDD	37000	0.708	1	0.0003	11.1
2,3,7,8-TCDF	56.3	0.299	1	0.1	5.63
1,2,3,7,8-PeCDF	44.4	1.05	1	0.03	1.33
2,3,4,7,8-PeCDF	53.9	1.02	1	0.3	16.2
1,2,3,4,7,8-HxCDF	210	8.50	1	0.1	21.0
1,2,3,6,7,8-HxCDF	81.6	6.56	1	0.1	8.16
1,2,3,7,8,9-HxCDF	ND	11.6	1	0.1	
2,3,4,6,7,8-HxCDF	66.0	8.36	1	0.1	6.60
1,2,3,4,6,7,8-HpCDF	1200	2.45	1	0.01	12.0
1,2,3,4,7,8,9-HpCDF	140	4.01	1	0.01	1.40
OCDF	3520	0.326	1	0.0003	1.06

Total TEQ

183

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: R0906411-016
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0958
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.016g
Data File Name: P204987
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1141
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	56.3	0.299	1.46	0.79	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	738.468	74		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	675.838	84		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-16-110509
Lab Code: R0906411-017
Service Request: R0906411
Date Collected: 11/5/09 1047
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.325g
Data File Name: P106052
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1320
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	6.73	0.123	1.34	0.79	1.001	1
1,2,3,7,8-PeCDD	11.1	0.150	3.35	1.59	1.000	1
1,2,3,4,7,8-HxCDD	19.0	0.438	3.35	1.18	0.998	1
1,2,3,6,7,8-HxCDD	45.3	0.309	3.35	1.27	1.000	1
1,2,3,7,8,9-HxCDD	36.4	0.387	3.35	1.23	1.009	1
1,2,3,4,6,7,8-HpCDD	1390 E	2.29	3.35	1.05	1.000	1
OCDD	23800 BE	1.10	6.71	0.90	1.000	1
2,3,7,8-TCDF	49.8 C	0.272	1.34	0.77	1.001	1
1,2,3,7,8-PeCDF	13.7	0.354	3.35	1.65	1.001	1
2,3,4,7,8-PeCDF	14.8	0.345	3.35	1.66	1.025	1
1,2,3,4,7,8-HxCDF	57.9	0.685	3.35	1.30	1.000	1
1,2,3,6,7,8-HxCDF	25.6	0.528	3.35	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.927	3.35			1
2,3,4,6,7,8-HxCDF	24.2	0.674	3.35	1.26	1.017	1
1,2,3,4,6,7,8-HpCDF	403	2.30	3.35	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	49.5	3.77	3.35	1.05	1.034	1
OCDF	1460 E	0.295	6.71	0.90	1.004	1
Total Tetra-Dioxins	195	0.123	1.34	0.77		1
Total Penta-Dioxins	140	0.150	3.35	1.56		1
Total Hexa-Dioxins	419	0.309	3.35	1.25		1
Total Hepta-Dioxins	2860	2.29	3.35	1.05		1
Total Tetra-Furans	302	0.272	1.34	0.78		1
Total Penta-Furans	295	0.345	3.35	1.57		1
Total Hexa-Furans	376	0.528	3.35	1.26		1
Total Hepta-Furans	1300	2.30	3.35	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1047
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-16-110509	Units:	Percent
Lab Code:	R0906411-017	Basis:	Dry
		Percent Solids:	72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1320
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.325g	Instrument Name:	E-HRMS-03
Data File Name:	P106052	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	807.261	81		40-135	0.81	1.009
13C-1,2,3,7,8-PeCDD	1000	765.795	77		40-135	1.57	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1786.596	71		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1634.788	65		40-135	1.07	1.068
13C-OCDD	5000	2706.736	54		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	769.616	77		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	855.471	86		40-135	1.58	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1890.027	76		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1449.932	58		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	766.706	96		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-16-110509
Lab Code: R0906411-017
Service Request: R0906411
Date Collected: 11/5/09 1047
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	6.73	0.123	1	1	6.73
1,2,3,7,8-PeCDD	11.1	0.150	1	1	11.1
1,2,3,4,7,8-HxCDD	19.0	0.438	1	0.1	1.90
1,2,3,6,7,8-HxCDD	45.3	0.309	1	0.1	4.53
1,2,3,7,8,9-HxCDD	36.4	0.387	1	0.1	3.64
1,2,3,4,6,7,8-HpCDD	1390	2.29	1	0.01	13.9
OCDD	23800	1.10	1	0.0003	7.14
2,3,7,8-TCDF	15.7	0.200	1	0.1	1.57
1,2,3,7,8-PeCDF	13.7	0.354	1	0.03	0.411
2,3,4,7,8-PeCDF	14.8	0.345	1	0.3	4.44
1,2,3,4,7,8-HxCDF	57.9	0.685	1	0.1	5.79
1,2,3,6,7,8-HxCDF	25.6	0.528	1	0.1	2.56
1,2,3,7,8,9-HxCDF	ND	0.927	1	0.1	
2,3,4,6,7,8-HxCDF	24.2	0.674	1	0.1	2.42
1,2,3,4,6,7,8-HpCDF	403	2.30	1	0.01	4.03
1,2,3,4,7,8,9-HpCDF	49.5	3.77	1	0.01	0.495
OCDF	1460	0.295	1	0.0003	0.438

Total TEQ 71.1

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1047
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-16-110509	Units:	ng/Kg
Lab Code:	R0906411-017	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 1218
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.325g	Instrument Name:	E-HRMS-04
Data File Name:	P204988	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204983
		Cal Ver. File Name:	P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	15.7	0.200	1.34	0.79	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	801.495	80		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	734.536	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g
Data File Name: P106053
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1408
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	20.1	0.132	1.34	0.78	1.001	1
1,2,3,7,8-PeCDD	35.5	0.199	3.34	1.59	1.000	1
1,2,3,4,7,8-HxCDD	51.1 K	0.152	3.34	1.52	0.998	1
1,2,3,6,7,8-HxCDD	163	0.107	3.34	1.22	1.000	1
1,2,3,7,8,9-HxCDD	139	0.134	3.34	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	5260 E	10.4	3.34	1.05	1.000	1
OCDD	71500 BE	0.678	6.68	0.90	1.000	1
2,3,7,8-TCDF	99.9 C	0.300	1.34	0.77	1.002	1
1,2,3,7,8-PeCDF	22.7	0.689	3.34	1.64	1.001	1
2,3,4,7,8-PeCDF	30.4	0.672	3.34	1.60	1.024	1
1,2,3,4,7,8-HxCDF	144	1.06	3.34	1.25	1.000	1
1,2,3,6,7,8-HxCDF	58.1	0.816	3.34	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.44	3.34			1
2,3,4,6,7,8-HxCDF	40.1	1.05	3.34	1.19	1.017	1
1,2,3,4,6,7,8-HpCDF	1690 E	6.06	3.34	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	156	9.91	3.34	1.08	1.034	1
OCDF	10200 E	0.251	6.68	0.90	1.004	1
Total Tetra-Dioxins	459	0.132	1.34	0.79		1
Total Penta-Dioxins	390	0.199	3.34	1.50		1
Total Hexa-Dioxins	1270	0.107	3.34	1.22		1
Total Hepta-Dioxins	10800	10.4	3.34	1.04		1
Total Tetra-Furans	674	0.300	1.34	0.78		1
Total Penta-Furans	533	0.672	3.34	1.61		1
Total Hexa-Furans	1550	0.816	3.34	1.25		1
Total Hepta-Furans	6940	6.06	3.34	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1210
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-17-110509	Units:	Percent
Lab Code:	R0906411-018	Basis:	Dry
		Percent Solids:	74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1408
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.071g	Instrument Name:	E-HRMS-03
Data File Name:	P106053	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	746.217	75		40-135	0.83	1.010
13C-1,2,3,7,8-PeCDD	1000	743.863	74		40-135	1.54	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1859.932	74		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1785.696	71		40-135	1.08	1.068
13C-OCDD	5000	3042.635	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	690.894	69		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	809.130	81		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1943.475	78		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1574.935	63		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	698.771	87		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	20.1	0.132	1	1	20.1
1,2,3,7,8-PeCDD	35.5	0.199	1	1	35.5
1,2,3,4,7,8-HxCDD	51.1	0.152	1	0.1	5.11
1,2,3,6,7,8-HxCDD	163	0.107	1	0.1	16.3
1,2,3,7,8,9-HxCDD	139	0.134	1	0.1	13.9
1,2,3,4,6,7,8-HpCDD	5610	6.77	10	0.01	56.1
OCDD	41800	3.20	10	0.0003	12.5
2,3,7,8-TCDF	33.1	0.336	1	0.1	3.31
1,2,3,7,8-PeCDF	22.7	0.689	1	0.03	0.681
2,3,4,7,8-PeCDF	30.4	0.672	1	0.3	9.12
1,2,3,4,7,8-HxCDF	144	1.06	1	0.1	14.4
1,2,3,6,7,8-HxCDF	58.1	0.816	1	0.1	5.81
1,2,3,7,8,9-HxCDF	ND	1.44	1	0.1	
2,3,4,6,7,8-HxCDF	40.1	1.05	1	0.1	4.01
1,2,3,4,6,7,8-HpCDF	2260	7.25	10	0.01	22.6
1,2,3,4,7,8,9-HpCDF	156	9.91	1	0.01	1.56
OCDF	10500	2.92	10	0.0003	3.15

Total TEQ

224

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P106295
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1906
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	27.0 K	1.50	13.4	0.96	1.001	10
1,2,3,7,8-PeCDD	53.4	1.49	33.4	1.45	1.000	10
1,2,3,4,7,8-HxCDD	70.3	25.0	33.4	1.36	0.998	10
1,2,3,6,7,8-HxCDD	228	22.7	33.4	1.29	1.000	10
1,2,3,7,8,9-HxCDD	174	24.0	33.4	1.19	1.008	10
1,2,3,4,6,7,8-HpCDD	5610	6.77	33.4	1.04	1.000	10
OCDD	41800 BE	3.20	66.8	0.90	1.000	10
2,3,7,8-TCDF	134 C	2.33	13.4	0.79	1.001	10
1,2,3,7,8-PeCDF	37.9	1.99	33.4	1.54	1.000	10
2,3,4,7,8-PeCDF	47.4	1.97	33.4	1.73	1.024	10
1,2,3,4,7,8-HxCDF	185	12.8	33.4	1.21	1.000	10
1,2,3,6,7,8-HxCDF	85.6	12.2	33.4	1.27	1.003	10
1,2,3,7,8,9-HxCDF	ND U	16.3	33.4			10
2,3,4,6,7,8-HxCDF	59.3	13.9	33.4	1.23	1.017	10
1,2,3,4,6,7,8-HpCDF	2260	7.25	33.4	1.05	1.000	10
1,2,3,4,7,8,9-HpCDF	260	10.1	33.4	1.07	1.034	10
OCDF	10500	2.92	66.8	0.90	1.004	10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P106295
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1906
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1330	990.936	74		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1350	1131.402	84		40-135	1.60	1.179
13C-1,2,3,6,7,8-HxCDD	3380	2438.966	72		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	3520	2662.789	76		40-135	1.06	1.068
13C-OCDD	8200	4826.890	59		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1450	1054.898	73		40-135	0.74	0.978
13C-1,2,3,7,8-PeCDF	1230	1162.671	94		40-135	1.61	1.139
13C-1,2,3,4,7,8-HxCDF	3210	2373.822	74		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	3970	2739.278	69		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	86.208	108		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P204989
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 1254
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	33.1	0.336	1.34	0.76	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	610.550	61		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	685.538	86		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1308
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-18-110509	Units:	ng/Kg
Lab Code:	R0906411-019	Basis:	Dry
		Percent Solids:	74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2010
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.385g	Instrument Name:	E-HRMS-03
Data File Name:	P106067	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	10.9	0.124	1.29	0.80	1.001	1
1,2,3,7,8-PeCDD	28.7	0.276	3.23	1.66	1.000	1
1,2,3,4,7,8-HxCDD	59.7	1.08	3.23	1.28	0.998	1
1,2,3,6,7,8-HxCDD	234	0.972	3.23	1.26	1.000	1
1,2,3,7,8,9-HxCDD	131	1.03	3.23	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	7740 BE	14.2	3.23	1.05	1.000	1
OCDD	82700 BE	0.565	6.45	0.90	1.000	1
2,3,7,8-TCDF	64.0 C	1.02	1.29	0.77	1.001	1
1,2,3,7,8-PeCDF	21.9 P	0.736	3.23	1.74	1.001	1
2,3,4,7,8-PeCDF	24.6	0.728	3.23	1.76	1.025	1
1,2,3,4,7,8-HxCDF	147	1.13	3.23	1.23	1.000	1
1,2,3,6,7,8-HxCDF	69.0	1.08	3.23	1.20	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.44	3.23			1
2,3,4,6,7,8-HxCDF	47.8	1.23	3.23	1.18	1.017	1
1,2,3,4,6,7,8-HpCDF	2600 BE	9.83	3.23	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	190	13.7	3.23	1.05	1.034	1
OCDF	20000 BE	0.201	6.45	0.90	1.004	1
Total Tetra-Dioxins	228	0.124	1.29	0.77		1
Total Penta-Dioxins	200	0.276	3.23	1.39		1
Total Hexa-Dioxins	1650	0.972	3.23	1.24		1
Total Hepta-Dioxins	15300	14.2	3.23	1.05		1
Total Tetra-Furans	422	1.02	1.29	0.77		1
Total Penta-Furans	540	0.728	3.23	1.60		1
Total Hexa-Furans	1230	1.08	3.23	1.24		1
Total Hepta-Furans	11500	9.83	3.23	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1308
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-18-110509	Units:	Percent
Lab Code:	R0906411-019	Basis:	Dry
		Percent Solids:	74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2010
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.385g	Instrument Name:	E-HRMS-03
Data File Name:	P106067	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	618.762	62		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	641.411	64		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1483.778	59		40-135	1.23	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1449.791	58		40-135	1.08	1.068
13C-OCDD	5000	2066.829	41		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	610.372	61		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	694.147	69		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1532.912	61		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1427.442	57		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	584.822	73		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	10.9	0.124	1	1	10.9
1,2,3,7,8-PeCDD	28.7	0.276	1	1	28.7
1,2,3,4,7,8-HxCDD	59.7	1.08	1	0.1	5.97
1,2,3,6,7,8-HxCDD	234	0.972	1	0.1	23.4
1,2,3,7,8,9-HxCDD	131	1.03	1	0.1	13.1
1,2,3,4,6,7,8-HpCDD	8840	18.4	50	0.01	88.4
OCDD	86400	6.81	50	0.0003	25.9
2,3,7,8-TCDF	21.2	0.260	1	0.1	2.12
1,2,3,7,8-PeCDF	21.9	0.736	1	0.03	0.657
2,3,4,7,8-PeCDF	24.6	0.728	1	0.3	7.38
1,2,3,4,7,8-HxCDF	147	1.13	1	0.1	14.7
1,2,3,6,7,8-HxCDF	69.0	1.08	1	0.1	6.90
1,2,3,7,8,9-HxCDF	ND	1.44	1	0.1	
2,3,4,6,7,8-HxCDF	47.8	1.23	1	0.1	4.78
1,2,3,4,6,7,8-HpCDF	3290	9.96	50	0.01	32.9
1,2,3,4,7,8,9-HpCDF	190	13.7	1	0.01	1.90
OCDF	23100	3.88	50	0.0003	6.93

Total TEQ 275

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Dilution
Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g
Data File Name: P205249
ICAL Date: 08/01/08
Date Analyzed: 12/4/09 1536
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	5.27	64.5			50
1,2,3,7,8-PeCDD	41.8 J	3.04	161	1.37	1.001	50
1,2,3,4,7,8-HxCDD	75.5 J	7.61	161	1.20	0.999	50
1,2,3,6,7,8-HxCDD	300 K	6.74	161	1.44	1.000	50
1,2,3,7,8,9-HxCDD	201	7.33	161	1.36	1.009	50
1,2,3,4,6,7,8-HpCDD	8840 B	18.4	161	1.02	1.000	50
OCDD	86400 B	6.81	323	0.90	1.000	50
2,3,7,8-TCDF	84.5 CK	9.97	64.5	0.93	1.001	50
1,2,3,7,8-PeCDF	20.6 J	7.00	161	1.36	1.000	50
2,3,4,7,8-PeCDF	27.2 JK	6.93	161	1.83	1.024	50
1,2,3,4,7,8-HxCDF	206	28.2	161	1.12	1.000	50
1,2,3,6,7,8-HxCDF	91.9 JK	27.1	161	1.04	1.004	50
1,2,3,7,8,9-HxCDF	ND U	35.3	161			50
2,3,4,6,7,8-HxCDF	47.2 JK	30.3	161	1.55	1.017	50
1,2,3,4,6,7,8-HpCDF	3290 B	9.96	161	1.04	1.000	50
1,2,3,4,7,8,9-HpCDF	240	13.6	161	0.92	1.034	50
OCDF	23100 B	3.88	323	0.90	1.004	50

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g

Data File Name: P205249
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 1536
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1610	872.174	54		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1560	1004.524	64		40-135	1.54	1.175
13C-1,2,3,6,7,8-HxCDD	4240	2365.220	56		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	4310	2989.156	69		40-135	1.06	1.068
13C-OCDD	12200	5591.298	46		40-135	0.88	1.147
13C-2,3,7,8-TCDF	1640	787.582	48		40-135	0.76	0.980
13C-1,2,3,7,8-PeCDF	1450	945.580	65		40-135	1.54	1.136
13C-1,2,3,4,7,8-HxCDF	4100	2260.617	55		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	4390	2725.815	62		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	11.246	70		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g
Data File Name: P205014
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1110
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	21.2	0.260	1.29	0.80	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	760.877	76		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	744.572	93		40-135	NA	0.988

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.724g
Data File Name: P106068
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2058
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.49	0.109	1.25	0.78	1.001	1
1,2,3,7,8-PeCDD	5.74	0.146	3.13	1.60	1.000	1
1,2,3,4,7,8-HxCDD	11.2	0.257	3.13	1.27	0.998	1
1,2,3,6,7,8-HxCDD	46.2	0.233	3.13	1.23	1.000	1
1,2,3,7,8,9-HxCDD	27.5	0.247	3.13	1.22	1.009	1
1,2,3,4,6,7,8-HpCDD	1730 BE	1.52	3.13	1.04	1.000	1
OCDD	22100 BE	1.48	6.27	0.90	1.000	1
2,3,7,8-TCDF	45.4 C	0.178	1.25	0.79	1.001	1
1,2,3,7,8-PeCDF	5.87	0.193	3.13	1.57	1.000	1
2,3,4,7,8-PeCDF	14.8	0.191	3.13	1.53	1.025	1
1,2,3,4,7,8-HxCDF	35.0	0.628	3.13	1.24	1.000	1
1,2,3,6,7,8-HxCDF	10.7	0.599	3.13	1.37	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.804	3.13			1
2,3,4,6,7,8-HxCDF	14.7	0.686	3.13	1.21	1.017	1
1,2,3,4,6,7,8-HpCDF	508 B	2.87	3.13	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	27.3	3.99	3.13	1.07	1.034	1
OCDF	3790 BE	0.547	6.27	0.90	1.004	1
Total Tetra-Dioxins	155	0.109	1.25	0.78		1
Total Penta-Dioxins	67.2	0.146	3.13	1.43		1
Total Hexa-Dioxins	335	0.233	3.13	1.26		1
Total Hepta-Dioxins	3600	1.52	3.13	1.06		1
Total Tetra-Furans	195	0.178	1.25	0.76		1
Total Penta-Furans	220	0.191	3.13	1.62		1
Total Hexa-Furans	245	0.599	3.13	1.27		1
Total Hepta-Furans	2160	2.87	3.13	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1440
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-19-110509	Units:	Percent
Lab Code:	R0906411-020	Basis:	Dry
		Percent Solids:	74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2058
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.724g	Instrument Name:	E-HRMS-03
Data File Name:	P106068	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	665.164	67		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	675.975	68		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1332.726	53		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1218.981	49		40-135	1.06	1.069
13C-OCDD	5000	1836.663	37	Y	40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	715.076	72		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	662.425	66		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1406.791	56		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1187.958	48		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	601.269	75		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.49	0.109	1	1	2.49
1,2,3,7,8-PeCDD	5.74	0.146	1	1	5.74
1,2,3,4,7,8-HxCDD	11.2	0.257	1	0.1	1.12
1,2,3,6,7,8-HxCDD	46.2	0.233	1	0.1	4.62
1,2,3,7,8,9-HxCDD	27.5	0.247	1	0.1	2.75
1,2,3,4,6,7,8-HpCDD	1730	1.52	1	0.01	17.3
OCDD	22100	1.48	1	0.0003	6.63
2,3,7,8-TCDF	8.45	0.0998	1	0.1	0.845
1,2,3,7,8-PeCDF	5.87	0.193	1	0.03	0.176
2,3,4,7,8-PeCDF	14.8	0.191	1	0.3	4.44
1,2,3,4,7,8-HxCDF	35.0	0.628	1	0.1	3.50
1,2,3,6,7,8-HxCDF	10.7	0.599	1	0.1	1.07
1,2,3,7,8,9-HxCDF	ND	0.804	1	0.1	
2,3,4,6,7,8-HxCDF	14.7	0.686	1	0.1	1.47
1,2,3,4,6,7,8-HpCDF	508	2.87	1	0.01	5.08
1,2,3,4,7,8,9-HpCDF	27.3	3.99	1	0.01	0.273
OCDF	3790	0.547	1	0.0003	1.14

Total TEQ 58.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.724g
Data File Name: P205015
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1147
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.45	0.0998	1.25	0.84	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	846.240	85	40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	694.645	87	40-135	NA	0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P106069
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2145
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.33	0.108	1.23	0.81	1.001	1
1,2,3,7,8-PeCDD	8.59	0.190	3.07	1.50	1.000	1
1,2,3,4,7,8-HxCDD	17.6	0.405	3.07	1.29	0.998	1
1,2,3,6,7,8-HxCDD	95.8	0.367	3.07	1.27	1.000	1
1,2,3,7,8,9-HxCDD	47.1	0.388	3.07	1.27	1.009	1
1,2,3,4,6,7,8-HpCDD	3850 BE	4.47	3.07	1.05	1.000	1
OCDD	49200 BE	0.914	6.15	0.90	1.000	1
2,3,7,8-TCDF	20.5 C	0.209	1.23	0.76	1.001	1
1,2,3,7,8-PeCDF	5.37	0.285	3.07	1.63	1.000	1
2,3,4,7,8-PeCDF	8.02	0.282	3.07	1.53	1.025	1
1,2,3,4,7,8-HxCDF	46.2	0.853	3.07	1.25	1.000	1
1,2,3,6,7,8-HxCDF	13.0	0.815	3.07	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.10	3.07			1
2,3,4,6,7,8-HxCDF	13.9	0.933	3.07	1.29	1.017	1
1,2,3,4,6,7,8-HpCDF	935 BE	1.99	3.07	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	57.7	2.76	3.07	1.06	1.034	1
OCDF	8500 BE	0.340	6.15	0.89	1.004	1
Total Tetra-Dioxins	832	0.108	1.23	0.79		1
Total Penta-Dioxins	114	0.190	3.07	1.45		1
Total Hexa-Dioxins	622	0.367	3.07	1.27		1
Total Hepta-Dioxins	7990	4.47	3.07	1.05		1
Total Tetra-Furans	99.8	0.209	1.23	0.79		1
Total Penta-Furans	212	0.282	3.07	1.60		1
Total Hexa-Furans	876	0.815	3.07	1.24		1
Total Hepta-Furans	4420	1.99	3.07	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P106069
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2145
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	672.476	67		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	714.743	71		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1748.388	70		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1682.112	67		40-135	1.06	1.069
13C-OCDD	5000	2323.082	46		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	663.814	66		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	738.581	74		40-135	1.62	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1846.411	74		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1652.431	66		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	641.410	80		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.33	0.108	1	1	4.33
1,2,3,7,8-PeCDD	8.59	0.190	1	1	8.59
1,2,3,4,7,8-HxCDD	17.6	0.405	1	0.1	1.76
1,2,3,6,7,8-HxCDD	95.8	0.367	1	0.1	9.58
1,2,3,7,8,9-HxCDD	47.1	0.388	1	0.1	4.71
1,2,3,4,6,7,8-HpCDD	2730	3.83	20	0.01	27.3
OCDD	39700	3.51	20	0.0003	11.9
2,3,7,8-TCDF	5.16	0.0978	1	0.1	0.516
1,2,3,7,8-PeCDF	5.37	0.285	1	0.03	0.161
2,3,4,7,8-PeCDF	8.02	0.282	1	0.3	2.41
1,2,3,4,7,8-HxCDF	46.2	0.853	1	0.1	4.62
1,2,3,6,7,8-HxCDF	13.0	0.815	1	0.1	1.30
1,2,3,7,8,9-HxCDF	ND	1.10	1	0.1	
2,3,4,6,7,8-HxCDF	13.9	0.933	1	0.1	1.39
1,2,3,4,6,7,8-HpCDF	707	2.65	20	0.01	7.07
1,2,3,4,7,8,9-HpCDF	57.7	2.76	1	0.01	0.577
OCDF	5970	2.58	20	0.0003	1.79

Total TEQ 88.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1510
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-20-110509	Units:	ng/Kg
Lab Code:	R0906411-021	Basis:	Dry
Run Type:	Dilution	Percent Solids:	76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/4/09 1927
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.633g	Instrument Name:	E-HRMS-04
Data File Name:	P205253	GC Column:	DB-5
ICAL Date:	08/01/08	Blank File Name:	P106058
		Cal Ver. File Name:	P205250

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.841	24.6			20
1,2,3,7,8-PeCDD	15.4 JK	0.707	61.5	1.19	1.000	20
1,2,3,4,7,8-HxCDD	16.3 J	3.24	61.5	1.37	0.998	20
1,2,3,6,7,8-HxCDD	87.1	2.87	61.5	1.28	1.000	20
1,2,3,7,8,9-HxCDD	67.0	3.13	61.5	1.18	1.009	20
1,2,3,4,6,7,8-HpCDD	2730 B	3.83	61.5	1.06	1.000	20
OCDD	39700 B	3.51	123	0.90	1.000	20
2,3,7,8-TCDF	ND U	2.29	24.6			20
1,2,3,7,8-PeCDF	6.14 J	2.25	61.5	1.60	1.001	20
2,3,4,7,8-PeCDF	8.82 JK	2.22	61.5	1.25	1.025	20
1,2,3,4,7,8-HxCDF	45.3 J	2.45	61.5	1.22	1.000	20
1,2,3,6,7,8-HxCDF	16.2 J	2.35	61.5	1.25	1.003	20
1,2,3,7,8,9-HxCDF	ND U	3.06	61.5			20
2,3,4,6,7,8-HxCDF	15.7 J	2.62	61.5	1.16	1.017	20
1,2,3,4,6,7,8-HpCDF	707 B	2.65	61.5	0.99	1.000	20
1,2,3,4,7,8,9-HpCDF	36.6 J	3.61	61.5	1.00	1.033	20
OCDF	5970 B	2.58	123	0.90	1.004	20

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g

Data File Name: P205253
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 1927
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1490	973.676	65		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1410	1100.456	78		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	3570	2458.320	69		40-135	1.21	0.992
13C-1,2,3,4,6,7,8-HpCDD	3730	2812.910	75		40-135	1.03	1.068
13C-OCDD	10900	4967.775	46		40-135	0.88	1.146
13C-2,3,7,8-TCDF	1520	909.310	60		40-135	0.74	0.979
13C-1,2,3,7,8-PeCDF	1350	1039.678	77		40-135	1.54	1.136
13C-1,2,3,4,7,8-HxCDF	3380	2418.205	72		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	3790	2480.927	65		40-135	0.42	1.044
37Cl-2,3,7,8-TCDD	800	22.979	57		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P205016
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1223
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	5.16	0.0978	1.23	0.77	1.000	1	
Labeled Compounds		Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio
13C-2,3,7,8-TCDF		1000	696.998	70		40-135	0.76
37Cl-2,3,7,8-TCDD		800	673.110	84		40-135	NA
							0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g
Data File Name: P106070
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2233
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	22.0	0.123	1.23	0.76	1.000	1
1,2,3,7,8-PeCDD	48.5	0.182	3.08	1.60	1.000	1
1,2,3,4,7,8-HxCDD	118	1.02	3.08	1.26	0.998	1
1,2,3,6,7,8-HxCDD	385	0.920	3.08	1.25	1.000	1
1,2,3,7,8,9-HxCDD	257	0.974	3.08	1.17	1.009	1
1,2,3,4,6,7,8-HpCDD	14000 BE	10.5	3.08	1.04	1.000	1
OCDD	134000 BE	1.22	6.16	0.92	1.000	1
2,3,7,8-TCDF	53.8 C	0.941	1.23	0.75	1.001	1
1,2,3,7,8-PeCDF	26.9 KP	0.441	3.08	2.02	1.001	1
2,3,4,7,8-PeCDF	31.3	0.436	3.08	1.56	1.025	1
1,2,3,4,7,8-HxCDF	199	1.33	3.08	1.33	1.000	1
1,2,3,6,7,8-HxCDF	83.4 K	1.27	3.08	1.45	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.70	3.08			1
2,3,4,6,7,8-HxCDF	124	1.45	3.08	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	4730 BE	5.66	3.08	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	293	7.87	3.08	1.07	1.034	1
OCDF	40800 BE	0.387	6.16	0.90	1.004	1
Total Tetra-Dioxins	338	0.123	1.23	0.78		1
Total Penta-Dioxins	504	0.182	3.08	1.46		1
Total Hexa-Dioxins	2890	0.920	3.08	1.26		1
Total Hepta-Dioxins	28200	10.5	3.08	1.05		1
Total Tetra-Furans	341	0.941	1.23	0.88		1
Total Penta-Furans	723	0.436	3.08	1.57		1
Total Hexa-Furans	1990	1.27	3.08	1.29		1
Total Hepta-Furans	19500	5.66	3.08	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-21-110509	Units:	Percent
Lab Code:	R0906411-022	Basis:	Dry
		Percent Solids:	76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2233
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.628g	Instrument Name:	E-HRMS-03
Data File Name:	P106070	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	656.193	66		40-135	0.76	1.010
13C-1,2,3,7,8-PeCDD	1000	676.854	68		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1482.323	59		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1481.106	59		40-135	1.08	1.068
13C-OCDD	5000	2085.304	42		40-135	0.91	1.148
13C-2,3,7,8-TCDF	1000	658.268	66		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	684.414	68		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1566.642	63		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1464.755	59		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	626.379	78		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	22.0	0.123	1	1	22.0
1,2,3,7,8-PeCDD	48.5	0.182	1	1	48.5
1,2,3,4,7,8-HxCDD	118	1.02	1	0.1	11.8
1,2,3,6,7,8-HxCDD	385	0.920	1	0.1	38.5
1,2,3,7,8,9-HxCDD	257	0.974	1	0.1	25.7
1,2,3,4,6,7,8-HpCDD	16500	16.7	100	0.01	165
OCDD	153000	15.2	100	0.0003	45.9
2,3,7,8-TCDF	19.5	0.186	1	0.1	1.95
1,2,3,7,8-PeCDF	26.9	0.441	1	0.03	0.807
2,3,4,7,8-PeCDF	31.3	0.436	1	0.3	9.39
1,2,3,4,7,8-HxCDF	199	1.33	1	0.1	19.9
1,2,3,6,7,8-HxCDF	83.4	1.27	1	0.1	8.34
1,2,3,7,8,9-HxCDF	ND	1.70	1	0.1	
2,3,4,6,7,8-HxCDF	124	1.45	1	0.1	12.4
1,2,3,4,6,7,8-HpCDF	6060	29.4	100	0.01	60.6
1,2,3,4,7,8,9-HpCDF	293	7.87	1	0.01	2.93
OCDF	42100	8.68	100	0.0003	12.6

Total TEQ 486

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205254
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 2014
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	26.6 JK	7.36	123	0.98	1.001	100
1,2,3,7,8-PeCDD	69.5 JK	4.88	308	1.18	1.000	100
1,2,3,4,7,8-HxCDD	159 J	8.46	308	1.22	0.998	100
1,2,3,6,7,8-HxCDD	652	7.50	308	1.15	1.000	100
1,2,3,7,8,9-HxCDD	533	8.17	308	1.39	1.008	100
1,2,3,4,6,7,8-HpCDD	16500 B	16.7	308	1.00	1.000	100
OCDD	153000 B	15.2	616	0.89	1.000	100
2,3,7,8-TCDF	29.2 CJ	13.0	123	0.67	1.002	100
1,2,3,7,8-PeCDF	59.3 J	9.68	308	1.49	1.001	100
2,3,4,7,8-PeCDF	38.4 J	9.59	308	1.33	1.024	100
1,2,3,4,7,8-HxCDF	271 J	55.1	308	1.24	1.000	100
1,2,3,6,7,8-HxCDF	183 J	52.9	308	1.29	1.003	100
1,2,3,7,8,9-HxCDF	ND U	68.9	308			100
2,3,4,6,7,8-HxCDF	117 JK	59.1	308	1.64	1.017	100
1,2,3,4,6,7,8-HpCDF	6060 B	29.4	308	1.06	1.000	100
1,2,3,4,7,8,9-HpCDF	307 J	40.1	308	0.94	1.033	100
OCDF	42100 B	8.68	616	0.88	1.004	100

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205254
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 2014
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1520	919.633	61		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1470	1087.316	74		40-135	1.55	1.176
13C-1,2,3,6,7,8-HxCDD	4240	2533.830	60		40-135	1.21	0.992
13C-1,2,3,4,6,7,8-HpCDD	4240	2889.168	68		40-135	1.04	1.068
13C-OCDD	11900	5031.631	42		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1520	880.190	58		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1470	1020.260	69		40-135	1.52	1.136
13C-1,2,3,4,7,8-HxCDF	3970	2448.075	62		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	4240	2712.893	64		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	6.436	80		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205017
ICAL Date: 03/16/09

Date Analyzed: 11/17/09 1300
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	19.5	0.186	1.23	0.69	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	659.192	66		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	636.226	80		40-135	NA	0.987

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1610
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-22-110509	Units:	ng/Kg
Lab Code:	R0906411-023	Basis:	Dry
		Percent Solids:	79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/4/09 1448
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.520g	Instrument Name:	E-HRMS-04
Data File Name:	P205248	GC Column:	DB-5
ICAL Date:	08/01/08	Blank File Name:	P106058
		Cal Ver. File Name:	P205246

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.0653	1.20			1
1,2,3,7,8-PeCDD	0.659 J	0.0676	3.00	1.37	1.000	1
1,2,3,4,7,8-HxCDD	0.891 J	0.0448	3.00	1.19	0.998	1
1,2,3,6,7,8-HxCDD	2.31 JK	0.0397	3.00	1.48	1.000	1
1,2,3,7,8,9-HxCDD	2.35 J	0.0431	3.00	1.33	1.008	1
1,2,3,4,6,7,8-HpCDD	72.9 B	0.0486	3.00	1.02	1.000	1
OCDD	1680 BE	0.0641	6.01	0.89	1.000	1
2,3,7,8-TCDF	1.51 C	0.152	1.20	0.88	1.001	1
1,2,3,7,8-PeCDF	0.355 J	0.106	3.00	1.43	1.001	1
2,3,4,7,8-PeCDF	0.440 J	0.105	3.00	1.35	1.025	1
1,2,3,4,7,8-HxCDF	1.66 J	0.162	3.00	1.25	1.000	1
1,2,3,6,7,8-HxCDF	0.795 JK	0.156	3.00	1.52	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.203	3.00			1
2,3,4,6,7,8-HxCDF	0.761 J	0.174	3.00	1.11	1.017	1
1,2,3,4,6,7,8-HpCDF	19.6 B	0.102	3.00	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	1.29 J	0.139	3.00	1.05	1.034	1
OCDF	76.6 B	0.0609	6.01	0.89	1.004	1
Total Tetra-Dioxins	0.585 J	0.0653	1.20	0.66		1
Total Penta-Dioxins	5.15	0.0676	3.00	1.38		1
Total Hexa-Dioxins	19.2	0.0397	3.00	1.25		1
Total Hepta-Dioxins	148	0.0486	3.00	1.02		1
Total Tetra-Furans	2.55	0.152	1.20	0.75		1
Total Penta-Furans	5.64	0.105	3.00	1.46		1
Total Hexa-Furans	18.2	0.156	3.00	1.24		1
Total Hepta-Furans	62.4	0.102	3.00	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1610
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-22-110509	Units:	Percent
Lab Code:	R0906411-023	Basis:	Dry
		Percent Solids:	79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/4/09 1448
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.520g	Instrument Name:	E-HRMS-04
Data File Name:	P205248	GC Column:	DB-5
ICAL Date:	08/01/08	Blank File Name:	P106058
		Cal Ver. File Name:	P205246

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	604.205	60		40-135	0.75	1.009
13C-1,2,3,7,8-PeCDD	1000	772.559	77		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	2500	2041.765	82		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	2314.042	93		40-135	1.03	1.068
13C-OCDD	5000	3909.313	78		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	545.900	55		40-135	0.77	0.980
13C-1,2,3,7,8-PeCDF	1000	669.351	67		40-135	1.51	1.136
13C-1,2,3,4,7,8-HxCDF	2500	1812.243	72		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	2026.229	81		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	558.366	70		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0653	1	1	
1,2,3,7,8-PeCDD	0.659	0.0676	1	1	0.659
1,2,3,4,7,8-HxCDD	0.891	0.0448	1	0.1	0.0891
1,2,3,6,7,8-HxCDD	2.31	0.0397	1	0.1	0.231
1,2,3,7,8,9-HxCDD	2.35	0.0431	1	0.1	0.235
1,2,3,4,6,7,8-HpCDD	72.9	0.0486	1	0.01	0.729
OCDD	1680	0.0641	1	0.0003	0.504
2,3,7,8-TCDF	0.507	0.0999	1	0.1	0.0507
1,2,3,7,8-PeCDF	0.355	0.106	1	0.03	0.0107
2,3,4,7,8-PeCDF	0.440	0.105	1	0.3	0.132
1,2,3,4,7,8-HxCDF	1.66	0.162	1	0.1	0.166
1,2,3,6,7,8-HxCDF	0.795	0.156	1	0.1	0.0795
1,2,3,7,8,9-HxCDF	ND	0.203	1	0.1	
2,3,4,6,7,8-HxCDF	0.761	0.174	1	0.1	0.0761
1,2,3,4,6,7,8-HpCDF	19.6	0.102	1	0.01	0.196
1,2,3,4,7,8,9-HpCDF	1.29	0.139	1	0.01	0.0129
OCDF	76.6	0.0609	1	0.0003	0.0230

Total TEQ

3.19

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.520g
Data File Name: P205018
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1337
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	0.507 J	0.0999	1.20	0.86	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	557.667	56	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	528.144	66	40-135	NA	0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.786g
Data File Name: P106072
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0008
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.57	0.0993	1.17	0.87	1.001	1
1,2,3,7,8-PeCDD	8.65 K	0.137	2.92	1.81	1.000	1
1,2,3,4,7,8-HxCDD	24.1	0.906	2.92	1.29	0.998	1
1,2,3,6,7,8-HxCDD	67.8	0.822	2.92	1.21	1.000	1
1,2,3,7,8,9-HxCDD	96.7	0.870	2.92	1.32	1.009	1
1,2,3,4,6,7,8-HpCDD	2570 BE	3.30	2.92	1.05	1.000	1
OCDD	25400 BE	0.930	5.83	0.90	1.000	1
2,3,7,8-TCDF	15.8 C	0.808	1.17	0.76	1.001	1
1,2,3,7,8-PeCDF	6.80	0.303	2.92	1.64	1.001	1
2,3,4,7,8-PeCDF	7.25	0.300	2.92	1.75	1.024	1
1,2,3,4,7,8-HxCDF	47.9	1.01	2.92	1.28	1.000	1
1,2,3,6,7,8-HxCDF	25.0	0.964	2.92	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.30	2.92			1
2,3,4,6,7,8-HxCDF	20.4	1.11	2.92	1.09	1.017	1
1,2,3,4,6,7,8-HpCDF	771 BE	2.77	2.92	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	54.9	3.86	2.92	1.08	1.033	1
OCDF	5770 BE	0.252	5.83	0.89	1.004	1
Total Tetra-Dioxins	90.6	0.0993	1.17	0.78		1
Total Penta-Dioxins	50.2	0.137	2.92	1.46		1
Total Hexa-Dioxins	1090	0.822	2.92	1.26		1
Total Hepta-Dioxins	5180	3.30	2.92	1.05		1
Total Tetra-Furans	99.7	0.808	1.17	0.75		1
Total Penta-Furans	134	0.300	2.92	1.59		1
Total Hexa-Furans	629	0.964	2.92	1.27		1
Total Hepta-Furans	3230	2.77	2.92	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.786g
Data File Name: P106072
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0008
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	665.345	67		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	700.159	70		40-135	1.56	1.180
13C-1,2,3,6,7,8-HxCDD	2500	765.191	31	Y	40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1602.730	64		40-135	1.07	1.068
13C-OCDD	5000	2396.987	48		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	614.101	61		40-135	0.79	0.980
13C-1,2,3,7,8-PeCDF	1000	720.465	72		40-135	1.61	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1702.964	68		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1569.464	63		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	656.008	82		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.57	0.0993	1	1	4.57
1,2,3,7,8-PeCDD	8.65	0.137	1	1	8.65
1,2,3,4,7,8-HxCDD	24.1	0.906	1	0.1	2.41
1,2,3,6,7,8-HxCDD	67.8	0.822	1	0.1	6.78
1,2,3,7,8,9-HxCDD	96.7	0.870	1	0.1	9.67
1,2,3,4,6,7,8-HpCDD	2570	3.30	1	0.01	25.7
OCDD	25400	0.930	1	0.0003	7.62
2,3,7,8-TCDF	5.56	0.133	1	0.1	0.556
1,2,3,7,8-PeCDF	6.80	0.303	1	0.03	0.204
2,3,4,7,8-PeCDF	7.25	0.300	1	0.3	2.18
1,2,3,4,7,8-HxCDF	47.9	1.01	1	0.1	4.79
1,2,3,6,7,8-HxCDF	25.0	0.964	1	0.1	2.50
1,2,3,7,8,9-HxCDF	ND	1.30	1	0.1	
2,3,4,6,7,8-HxCDF	20.4	1.11	1	0.1	2.04
1,2,3,4,6,7,8-HpCDF	771	2.77	1	0.01	7.71
1,2,3,4,7,8,9-HpCDF	54.9	3.86	1	0.01	0.549
OCDF	5770	0.252	1	0.0003	1.73

Total TEQ 87.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-23-110509	Units:	ng/Kg
Lab Code:	R0906411-024	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 1414
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.786g	Instrument Name:	E-HRMS-04
Data File Name:	P205019	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P205011
		Cal Ver. File Name:	P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.56	0.133	1.17	0.85	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	705.270	71	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	682.428	85	40-135	NA	0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.585g
Data File Name: P106073
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0056
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.08	0.156	1.23	0.78	1.001	1
1,2,3,7,8-PeCDD	5.88	0.206	3.07	1.61	1.000	1
1,2,3,4,7,8-HxCDD	11.7	0.620	3.07	1.19	0.998	1
1,2,3,6,7,8-HxCDD	50.1	0.562	3.07	1.23	1.000	1
1,2,3,7,8,9-HxCDD	32.0	0.595	3.07	1.16	1.009	1
1,2,3,4,6,7,8-HpCDD	1780 BE	6.07	3.07	1.06	1.000	1
OCDD	19500 BE	1.13	6.13	0.90	1.000	1
2,3,7,8-TCDF	11.4 C	0.371	1.23	0.83	1.001	1
1,2,3,7,8-PeCDF	4.52	0.286	3.07	1.71	1.001	1
2,3,4,7,8-PeCDF	5.47	0.283	3.07	1.57	1.025	1
1,2,3,4,7,8-HxCDF	29.7	0.762	3.07	1.27	1.000	1
1,2,3,6,7,8-HxCDF	14.2	0.728	3.07	1.10	1.004	1
1,2,3,7,8,9-HxCDF	ND U	0.976	3.07			1
2,3,4,6,7,8-HxCDF	15.4	0.833	3.07	1.14	1.017	1
1,2,3,4,6,7,8-HpCDF	536 B	1.39	3.07	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	34.6	1.93	3.07	1.07	1.034	1
OCDF	3950 BE	0.418	6.13	0.90	1.004	1
Total Tetra-Dioxins	68.0	0.156	1.23	0.78		1
Total Penta-Dioxins	77.9	0.206	3.07	1.55		1
Total Hexa-Dioxins	361	0.562	3.07	1.28		1
Total Hepta-Dioxins	3670	6.07	3.07	1.05		1
Total Tetra-Furans	68.2	0.371	1.23	0.78		1
Total Penta-Furans	110	0.283	3.07	1.58		1
Total Hexa-Furans	263	0.728	3.07	1.29		1
Total Hepta-Furans	2220	1.39	3.07	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-23-110509-D	Units:	Percent
Lab Code:	R0906411-025	Basis:	Dry
		Percent Solids:	77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0056
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.585g	Instrument Name:	E-HRMS-03
Data File Name:	P106073	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	569.386	57		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	568.785	57		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1430.891	57		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1378.064	55		40-135	1.07	1.068
13C-OCDD	5000	2080.024	42		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	553.671	55		40-135	0.76	0.980
13C-1,2,3,7,8-PeCDF	1000	559.245	56		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1514.154	61		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1373.704	55		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	513.169	64		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.08	0.156	1	1	4.08
1,2,3,7,8-PeCDD	5.88	0.206	1	1	5.88
1,2,3,4,7,8-HxCDD	11.7	0.620	1	0.1	1.17
1,2,3,6,7,8-HxCDD	50.1	0.562	1	0.1	5.01
1,2,3,7,8,9-HxCDD	32.0	0.595	1	0.1	3.20
1,2,3,4,6,7,8-HpCDD	1780	6.07	1	0.01	17.8
OCDD	19500	1.13	1	0.0003	5.85
2,3,7,8-TCDF	4.05	0.0964	1	0.1	0.405
1,2,3,7,8-PeCDF	4.52	0.286	1	0.03	0.136
2,3,4,7,8-PeCDF	5.47	0.283	1	0.3	1.64
1,2,3,4,7,8-HxCDF	29.7	0.762	1	0.1	2.97
1,2,3,6,7,8-HxCDF	14.2	0.728	1	0.1	1.42
1,2,3,7,8,9-HxCDF	ND	0.976	1	0.1	
2,3,4,6,7,8-HxCDF	15.4	0.833	1	0.1	1.54
1,2,3,4,6,7,8-HpCDF	536	1.39	1	0.01	5.36
1,2,3,4,7,8,9-HpCDF	34.6	1.93	1	0.01	0.346
OCDF	3950	0.418	1	0.0003	1.19

Total TEQ 58.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.585g
Data File Name: P205020
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1450
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.05	0.0964	1.23	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	610.359	61		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	576.235	72		40-135	NA	0.988

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0845
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-24-110609	Units:	ng/Kg
Lab Code:	R0906411-026	Basis:	Dry
		Percent Solids:	74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0143
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.393g	Instrument Name:	E-HRMS-03
Data File Name:	P106074	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	3.92	0.114	1.30	0.75	1.001	1
1,2,3,7,8-PeCDD	10.1	0.176	3.25	1.74	1.000	1
1,2,3,4,7,8-HxCDD	20.7	0.695	3.25	1.23	0.998	1
1,2,3,6,7,8-HxCDD	83.2	0.630	3.25	1.25	1.000	1
1,2,3,7,8,9-HxCDD	52.4	0.667	3.25	1.33	1.009	1
1,2,3,4,6,7,8-HpCDD	2910 BE	8.66	3.25	1.04	1.000	1
OCDD	29900 BE	1.09	6.50	0.90	1.000	1
2,3,7,8-TCDF	14.1 C	0.386	1.30	0.78	1.001	1
1,2,3,7,8-PeCDF	5.03 K	0.275	3.25	1.86	1.001	1
2,3,4,7,8-PeCDF	7.78	0.272	3.25	1.43	1.025	1
1,2,3,4,7,8-HxCDF	57.2	1.11	3.25	1.20	1.000	1
1,2,3,6,7,8-HxCDF	25.9	1.06	3.25	1.37	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.42	3.25			1
2,3,4,6,7,8-HxCDF	35.3	1.21	3.25	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	1040 BE	4.15	3.25	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	71.5	5.77	3.25	1.04	1.034	1
OCDF	7310 BE	0.451	6.50	0.90	1.004	1
Total Tetra-Dioxins	54.0	0.114	1.30	0.79		1
Total Penta-Dioxins	105	0.176	3.25	1.41		1
Total Hexa-Dioxins	597	0.630	3.25	1.28		1
Total Hepta-Dioxins	6010	8.66	3.25	1.05		1
Total Tetra-Furans	88.5	0.386	1.30	0.86		1
Total Penta-Furans	165	0.272	3.25	1.61		1
Total Hexa-Furans	534	1.06	3.25	1.21		1
Total Hepta-Furans	4310	4.15	3.25	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0845
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-24-110609	Units:	Percent
Lab Code:	R0906411-026	Basis:	Dry
		Percent Solids:	74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0143
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.393g	Instrument Name:	E-HRMS-03
Data File Name:	P106074	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	618.043	62		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	624.146	62		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1321.713	53		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1228.336	49		40-135	1.08	1.068
13C-OCDD	5000	1822.654	36	Y	40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	635.362	64		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	633.477	63		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1413.625	57		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1193.448	48		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	538.063	67		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-24-110609
Lab Code: R0906411-026
Service Request: R0906411
Date Collected: 11/6/09 0845
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	3.92	0.114	1	1	3.92
1,2,3,7,8-PeCDD	10.1	0.176	1	1	10.1
1,2,3,4,7,8-HxCDD	20.7	0.695	1	0.1	2.07
1,2,3,6,7,8-HxCDD	83.2	0.630	1	0.1	8.32
1,2,3,7,8,9-HxCDD	52.4	0.667	1	0.1	5.24
1,2,3,4,6,7,8-HpCDD	2910	8.66	1	0.01	29.1
OCDD	29900	1.09	1	0.0003	8.97
2,3,7,8-TCDF	5.03	0.137	1	0.1	0.503
1,2,3,7,8-PeCDF	5.03	0.275	1	0.03	0.151
2,3,4,7,8-PeCDF	7.78	0.272	1	0.3	2.33
1,2,3,4,7,8-HxCDF	57.2	1.11	1	0.1	5.72
1,2,3,6,7,8-HxCDF	25.9	1.06	1	0.1	2.59
1,2,3,7,8,9-HxCDF	ND	1.42	1	0.1	
2,3,4,6,7,8-HxCDF	35.3	1.21	1	0.1	3.53
1,2,3,4,6,7,8-HpCDF	1040	4.15	1	0.01	10.4
1,2,3,4,7,8,9-HpCDF	71.5	5.77	1	0.01	0.715
OCDF	7310	0.451	1	0.0003	2.19

Total TEQ 95.8

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-24-110609
Lab Code: R0906411-026
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 0845
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.393g
Data File Name: P205021
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1527
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	5.03	0.137	1.30	0.73	1.001	1	
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000		629.767		63		40-135
37Cl-2,3,7,8-TCDD	800		529.028		66		40-135
						0.77	1.059
						NA	0.988

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0909
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-25-110609	Units:	ng/Kg
Lab Code:	R0906411-027	Basis:	Dry
		Percent Solids:	75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0231
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.361g	Instrument Name:	E-HRMS-03
Data File Name:	P106075	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	41.4	0.0966	1.28	0.77	1.001	1
1,2,3,7,8-PeCDD	9.32	0.181	3.20	1.40	1.000	1
1,2,3,4,7,8-HxCDD	18.0	0.980	3.20	1.23	0.998	1
1,2,3,6,7,8-HxCDD	61.1	0.889	3.20	1.29	1.000	1
1,2,3,7,8,9-HxCDD	36.1 K	0.941	3.20	1.48	1.009	1
1,2,3,4,6,7,8-HpCDD	2150 BE	6.53	3.20	1.05	1.000	1
OCDD	27500 BE	1.06	6.41	0.90	1.000	1
2,3,7,8-TCDF	22.6 C	0.140	1.28	0.81	1.001	1
1,2,3,7,8-PeCDF	6.37	0.288	3.20	1.60	1.001	1
2,3,4,7,8-PeCDF	10.5	0.285	3.20	1.58	1.025	1
1,2,3,4,7,8-HxCDF	52.4	1.20	3.20	1.26	1.000	1
1,2,3,6,7,8-HxCDF	25.2	1.15	3.20	1.29	1.004	1
1,2,3,7,8,9-HxCDF	ND U	1.54	3.20			1
2,3,4,6,7,8-HxCDF	32.4	1.31	3.20	1.30	1.017	1
1,2,3,4,6,7,8-HpCDF	613 B	5.09	3.20	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	52.4	7.08	3.20	1.04	1.034	1
OCDF	3970 BE	0.428	6.41	0.90	1.004	1
Total Tetra-Dioxins	108	0.0966	1.28	0.76		1
Total Penta-Dioxins	87.9	0.181	3.20	1.58		1
Total Hexa-Dioxins	443	0.889	3.20	1.28		1
Total Hepta-Dioxins	4420	6.53	3.20	1.05		1
Total Tetra-Furans	111	0.140	1.28	0.77		1
Total Penta-Furans	201	0.285	3.20	1.61		1
Total Hexa-Furans	592	1.15	3.20	1.25		1
Total Hepta-Furans	2350	5.09	3.20	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: R0906411-027
Service Request: R0906411
Date Collected: 11/6/09 0909
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.361g
Data File Name: P106075
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0231
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	574.064	57		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	591.327	59		40-135	1.61	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1502.626	60		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1436.142	57		40-135	1.09	1.068
13C-OCDD	5000	2127.300	43		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	558.152	56		40-135	0.78	0.980
13C-1,2,3,7,8-PeCDF	1000	540.756	54		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1594.496	64		40-135	0.54	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1410.361	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	516.867	65		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: R0906411-027

Service Request: R0906411
Date Collected: 11/6/09 0909
Date Received: 11/7/09

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	41.4	0.0966	1	1	41.4
1,2,3,7,8-PeCDD	9.32	0.181	1	1	9.32
1,2,3,4,7,8-HxCDD	18.0	0.980	1	0.1	1.80
1,2,3,6,7,8-HxCDD	61.1	0.889	1	0.1	6.11
1,2,3,7,8,9-HxCDD	36.1	0.941	1	0.1	3.61
1,2,3,4,6,7,8-HpCDD	2150	6.53	1	0.01	21.5
OCDD	27500	1.06	1	0.0003	8.25
2,3,7,8-TCDF	8.34	0.0893	1	0.1	0.834
1,2,3,7,8-PeCDF	6.37	0.288	1	0.03	0.191
2,3,4,7,8-PeCDF	10.5	0.285	1	0.3	3.15
1,2,3,4,7,8-HxCDF	52.4	1.20	1	0.1	5.24
1,2,3,6,7,8-HxCDF	25.2	1.15	1	0.1	2.52
1,2,3,7,8,9-HxCDF	ND	1.54	1	0.1	
2,3,4,6,7,8-HxCDF	32.4	1.31	1	0.1	3.24
1,2,3,4,6,7,8-HpCDF	613	5.09	1	0.01	6.13
1,2,3,4,7,8,9-HpCDF	52.4	7.08	1	0.01	0.524
OCDF	3970	0.428	1	0.0003	1.19

Total TEQ 115

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0909
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-25-110609	Units:	ng/Kg
Lab Code:	R0906411-027	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 2307
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.361g	Instrument Name:	E-HRMS-04
Data File Name:	P205032	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P205027
		Cal Ver. File Name:	P205024

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.34		0.0893	1.28	0.83	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	607.125	61		40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	561.515	70		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0942
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-26-110609	Units:	ng/Kg
Lab Code:	R0906411-028	Basis:	Dry
		Percent Solids:	75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0319
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.886g	Instrument Name:	E-HRMS-03
Data File Name:	P106076	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.46	0.0946	1.12	0.78	1.001	1
1,2,3,7,8-PeCDD	4.46	0.161	2.80	1.57	1.000	1
1,2,3,4,7,8-HxCDD	6.79	0.254	2.80	1.28	0.998	1
1,2,3,6,7,8-HxCDD	29.2	0.231	2.80	1.23	1.000	1
1,2,3,7,8,9-HxCDD	18.3	0.244	2.80	1.30	1.009	1
1,2,3,4,6,7,8-HpCDD	1050 BE	1.76	2.80	1.04	1.000	1
OCDD	11300 BE	1.11	5.60	0.90	1.000	1
2,3,7,8-TCDF	9.38 C	0.342	1.12	0.74	1.001	1
1,2,3,7,8-PeCDF	2.96 K	0.292	2.80	2.19	1.001	1
2,3,4,7,8-PeCDF	3.76	0.289	2.80	1.72	1.025	1
1,2,3,4,7,8-HxCDF	20.8	0.674	2.80	1.27	1.000	1
1,2,3,6,7,8-HxCDF	10.6	0.644	2.80	1.19	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.864	2.80			1
2,3,4,6,7,8-HxCDF	12.0	0.737	2.80	1.21	1.017	1
1,2,3,4,6,7,8-HpCDF	297 B	1.64	2.80	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	17.9	2.27	2.80	0.97	1.035	1
OCDF	1940 BE	0.461	5.60	0.90	1.004	1
Total Tetra-Dioxins	40.6	0.0946	1.12	0.74		1
Total Penta-Dioxins	52.8	0.161	2.80	1.57		1
Total Hexa-Dioxins	247	0.231	2.80	1.22		1
Total Hepta-Dioxins	2250	1.76	2.80	1.05		1
Total Tetra-Furans	55.2	0.342	1.12	0.77		1
Total Penta-Furans	83.3	0.289	2.80	1.61		1
Total Hexa-Furans	262	0.644	2.80	1.30		1
Total Hepta-Furans	1160	1.64	2.80	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0942
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-26-110609	Units:	Percent
Lab Code:	R0906411-028	Basis:	Dry
		Percent Solids:	75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0319
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.886g	Instrument Name:	E-HRMS-03
Data File Name:	P106076	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	636.731	64		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	642.611	64		40-135	1.58	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1645.150	66		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1544.312	62		40-135	1.08	1.068
13C-OCDD	5000	2334.978	47		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	616.251	62		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1000	618.516	62		40-135	1.55	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1703.936	68		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1528.975	61		40-135	0.45	1.044
37Cl-2,3,7,8-TCDD	800	583.264	73		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-26-110609
Lab Code: R0906411-028
Service Request: R0906411
Date Collected: 11/6/09 0942
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.46	0.0946	1	1	2.46
1,2,3,7,8-PeCDD	4.46	0.161	1	1	4.46
1,2,3,4,7,8-HxCDD	6.79	0.254	1	0.1	0.679
1,2,3,6,7,8-HxCDD	29.2	0.231	1	0.1	2.92
1,2,3,7,8,9-HxCDD	18.3	0.244	1	0.1	1.83
1,2,3,4,6,7,8-HpCDD	1050	1.76	1	0.01	10.5
OCDD	11300	1.11	1	0.0003	3.39
2,3,7,8-TCDF	4.07	0.0640	1	0.1	0.407
1,2,3,7,8-PeCDF	2.96	0.292	1	0.03	0.0888
2,3,4,7,8-PeCDF	3.76	0.289	1	0.3	1.13
1,2,3,4,7,8-HxCDF	20.8	0.674	1	0.1	2.08
1,2,3,6,7,8-HxCDF	10.6	0.644	1	0.1	1.06
1,2,3,7,8,9-HxCDF	ND	0.864	1	0.1	
2,3,4,6,7,8-HxCDF	12.0	0.737	1	0.1	1.20
1,2,3,4,6,7,8-HpCDF	297	1.64	1	0.01	2.97
1,2,3,4,7,8,9-HpCDF	17.9	2.27	1	0.01	0.179
OCDF	1940	0.461	1	0.0003	0.582

Total TEQ 35.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-26-110609
Lab Code: R0906411-028
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 0942
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.886g
Data File Name: P205033
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 2344
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.07	0.0640	1.12	0.80	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	683.037	68	40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	612.122	77	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P106085
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1152
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.22	0.0980	1.17	0.75	1.001	1
1,2,3,7,8-PeCDD	13.0	0.203	2.93	1.61	1.000	1
1,2,3,4,7,8-HxCDD	25.5	0.543	2.93	1.25	0.999	1
1,2,3,6,7,8-HxCDD	141	0.492	2.93	1.27	1.000	1
1,2,3,7,8,9-HxCDD	72.2	0.521	2.93	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	3630 BE	3.56	2.93	1.05	1.000	1
OCDD	30400 BE	0.436	5.86	0.90	1.000	1
2,3,7,8-TCDF	24.6 C	0.619	1.17	0.79	1.001	1
1,2,3,7,8-PeCDF	8.98	0.958	2.93	1.51	1.001	1
2,3,4,7,8-PeCDF	11.4	0.948	2.93	1.45	1.025	1
1,2,3,4,7,8-HxCDF	50.9	0.230	2.93	1.25	1.000	1
1,2,3,6,7,8-HxCDF	26.4	0.220	2.93	1.30	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.295	2.93			1
2,3,4,6,7,8-HxCDF	34.1	0.252	2.93	1.32	1.017	1
1,2,3,4,6,7,8-HpCDF	736 BE	1.15	2.93	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	55.5	1.60	2.93	1.03	1.034	1
OCDF	4150 BE	0.211	5.86	0.90	1.004	1
Total Tetra-Dioxins	99.1	0.0980	1.17	0.80		1
Total Penta-Dioxins	145	0.203	2.93	1.50		1
Total Hexa-Dioxins	790	0.492	2.93	1.28		1
Total Hepta-Dioxins	6690	3.56	2.93	1.05		1
Total Tetra-Furans	167	0.619	1.17	0.82		1
Total Penta-Furans	267	0.948	2.93	1.61		1
Total Hexa-Furans	490	0.220	2.93	1.24		1
Total Hepta-Furans	2870	1.15	2.93	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P106085
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1152
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	608.720	61		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	592.322	59		40-135	1.57	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1434.374	57		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1427.323	57		40-135	1.07	1.068
13C-OCDD	5000	2302.016	46		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	615.238	62		40-135	0.78	0.980
13C-1,2,3,7,8-PeCDF	1000	549.525	55		40-135	1.58	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1548.590	62		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1391.919	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	542.769	68		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.22	0.0980	1	1	7.22
1,2,3,7,8-PeCDD	13.0	0.203	1	1	13.0
1,2,3,4,7,8-HxCDD	25.5	0.543	1	0.1	2.55
1,2,3,6,7,8-HxCDD	141	0.492	1	0.1	14.1
1,2,3,7,8,9-HxCDD	72.2	0.521	1	0.1	7.22
1,2,3,4,6,7,8-HpCDD	4750	5.02	10	0.01	47.5
OCDD	38000	2.41	10	0.0003	11.4
2,3,7,8-TCDF	9.81	0.0738	1	0.1	0.981
1,2,3,7,8-PeCDF	8.98	0.958	1	0.03	0.269
2,3,4,7,8-PeCDF	11.4	0.948	1	0.3	3.42
1,2,3,4,7,8-HxCDF	50.9	0.230	1	0.1	5.09
1,2,3,6,7,8-HxCDF	26.4	0.220	1	0.1	2.64
1,2,3,7,8,9-HxCDF	ND	0.295	1	0.1	
2,3,4,6,7,8-HxCDF	34.1	0.252	1	0.1	3.41
1,2,3,4,6,7,8-HpCDF	962	6.33	10	0.01	9.62
1,2,3,4,7,8,9-HpCDF	55.5	1.60	1	0.01	0.555
OCDF	5660	1.72	10	0.0003	1.70

Total TEQ

131

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g

Data File Name: P106296
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1953
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.67 J	1.85	11.7	0.82	1.001	10
1,2,3,7,8-PeCDD	20.3 J	1.28	29.3	1.33	1.000	10
1,2,3,4,7,8-HxCDD	38.9	2.33	29.3	1.38	0.998	10
1,2,3,6,7,8-HxCDD	193	2.11	29.3	1.20	1.000	10
1,2,3,7,8,9-HxCDD	106	2.23	29.3	1.37	1.008	10
1,2,3,4,6,7,8-HpCDD	4750 B	5.02	29.3	1.05	1.000	10
OCDD	38000 BE	2.41	58.6	0.90	1.000	10
2,3,7,8-TCDF	31.4 C	2.51	11.7	0.79	1.001	10
1,2,3,7,8-PeCDF	17.1 J	1.82	29.3	1.45	1.000	10
2,3,4,7,8-PeCDF	17.1 J	1.80	29.3	1.37	1.024	10
1,2,3,4,7,8-HxCDF	69.5	1.63	29.3	1.13	1.000	10
1,2,3,6,7,8-HxCDF	32.1	1.56	29.3	1.18	1.003	10
1,2,3,7,8,9-HxCDF	ND U	2.09	29.3			10
2,3,4,6,7,8-HxCDF	26.9 J	1.78	29.3	1.15	1.017	10
1,2,3,4,6,7,8-HpCDF	962 B	6.33	29.3	1.07	1.000	10
1,2,3,4,7,8,9-HpCDF	91.3	8.80	29.3	0.92	1.033	10
OCDF	5660 B	1.72	58.6	0.90	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g

Data File Name: P106296
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1953
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1640	1119.455	68		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1690	1242.713	73		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	4390	2723.117	62		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4390	3085.735	70		40-135	1.06	1.068
13C-OCDD	10900	5758.321	53		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1610	1228.199	76		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1820	1320.965	73		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	4030	2658.168	66		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	4460	3078.259	69		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	75.579	94		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P205034
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0021
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	9.81	0.0738	1.17	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	638.989	64		40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	547.038	68		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g
Data File Name: P106086
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1240
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.80	0.0976	1.18	0.76	1.001	1
1,2,3,7,8-PeCDD	9.89	0.142	2.94	1.56	1.000	1
1,2,3,4,7,8-HxCDD	21.1	0.432	2.94	1.22	0.999	1
1,2,3,6,7,8-HxCDD	107	0.392	2.94	1.26	1.000	1
1,2,3,7,8,9-HxCDD	60.3	0.415	2.94	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	3790 BE	6.82	2.94	1.05	1.000	1
OCDD	39600 BE	0.785	5.89	0.90	1.000	1
2,3,7,8-TCDF	25.9 C	0.154	1.18	0.77	1.001	1
1,2,3,7,8-PeCDF	5.19 K	0.624	2.94	1.89	1.000	1
2,3,4,7,8-PeCDF	10.3	0.617	2.94	1.72	1.025	1
1,2,3,4,7,8-HxCDF	47.2	0.138	2.94	1.25	1.000	1
1,2,3,6,7,8-HxCDF	20.2	0.132	2.94	1.28	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.177	2.94			1
2,3,4,6,7,8-HxCDF	26.1	0.151	2.94	1.24	1.017	1
1,2,3,4,6,7,8-HpCDF	1040 BE	2.25	2.94	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	62.1	3.13	2.94	1.02	1.034	1
OCDF	9340 BE	0.245	5.89	0.91	1.004	1
Total Tetra-Dioxins	590	0.0976	1.18	0.79		1
Total Penta-Dioxins	113	0.142	2.94	1.50		1
Total Hexa-Dioxins	639	0.392	2.94	1.25		1
Total Hepta-Dioxins	7240	6.82	2.94	1.05		1
Total Tetra-Furans	189	0.154	1.18	0.81		1
Total Penta-Furans	226	0.617	2.94	1.60		1
Total Hexa-Furans	776	0.132	2.94	1.25		1
Total Hepta-Furans	4500	2.25	2.94	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g
Data File Name: P106086
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1240
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	736.219	74		40-135	0.78	1.010
13C-1,2,3,7,8-PeCDD	1000	746.839	75		40-135	1.58	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1876.331	75		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1788.105	72		40-135	1.07	1.068
13C-OCDD	5000	2472.554	49		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	741.795	74		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	714.055	71		40-135	1.59	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1966.564	79		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1784.129	71		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	708.490	89		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.80	0.0976	1	1	7.80
1,2,3,7,8-PeCDD	9.89	0.142	1	1	9.89
1,2,3,4,7,8-HxCDD	21.1	0.432	1	0.1	2.11
1,2,3,6,7,8-HxCDD	107	0.392	1	0.1	10.7
1,2,3,7,8,9-HxCDD	60.3	0.415	1	0.1	6.03
1,2,3,4,6,7,8-HpCDD	7190	6.02	10	0.01	71.9
OCDD	87400	2.61	10	0.0003	26.2
2,3,7,8-TCDF	6.23	0.103	1	0.1	0.623
1,2,3,7,8-PeCDF	5.19	0.624	1	0.03	0.156
2,3,4,7,8-PeCDF	10.3	0.617	1	0.3	3.09
1,2,3,4,7,8-HxCDF	47.2	0.138	1	0.1	4.72
1,2,3,6,7,8-HxCDF	20.2	0.132	1	0.1	2.02
1,2,3,7,8,9-HxCDF	ND	0.177	1	0.1	
2,3,4,6,7,8-HxCDF	26.1	0.151	1	0.1	2.61
1,2,3,4,6,7,8-HpCDF	1950	5.62	10	0.01	19.5
1,2,3,4,7,8,9-HpCDF	62.1	3.13	1	0.01	0.621
OCDF	18500	2.38	10	0.0003	5.55

Total TEQ

174

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g

Data File Name: P106297
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2041
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	10.8 JK	1.39	11.8	1.09	1.001	10
1,2,3,7,8-PeCDD	20.6 J	1.89	29.4	1.73	1.000	10
1,2,3,4,7,8-HxCDD	43.0	2.50	29.4	1.19	0.998	10
1,2,3,6,7,8-HxCDD	208	2.27	29.4	1.26	1.000	10
1,2,3,7,8,9-HxCDD	122	2.40	29.4	1.21	1.008	10
1,2,3,4,6,7,8-HpCDD	7190 B	6.02	29.4	1.05	1.000	10
OCDD	87400 BE	2.61	58.9	0.90	1.000	10
2,3,7,8-TCDF	44.4 C	1.67	11.8	0.76	1.002	10
1,2,3,7,8-PeCDF	13.7 J	2.34	29.4	1.70	1.000	10
2,3,4,7,8-PeCDF	21.0 J	2.31	29.4	1.77	1.024	10
1,2,3,4,7,8-HxCDF	89.7	4.77	29.4	1.26	1.000	10
1,2,3,6,7,8-HxCDF	34.7	4.56	29.4	1.21	1.003	10
1,2,3,7,8,9-HxCDF	ND U	6.11	29.4			10
2,3,4,6,7,8-HxCDF	26.2 J	5.21	29.4	1.13	1.017	10
1,2,3,4,6,7,8-HpCDF	1950 B	5.62	29.4	1.04	1.000	10
1,2,3,4,7,8,9-HpCDF	145	7.82	29.4	1.05	1.033	10
OCDF	18500 B	2.38	58.9	0.89	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g

Data File Name: P106297
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2041
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1350	1031.190	76		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1330	1116.403	84		40-135	1.59	1.179
13C-1,2,3,6,7,8-HxCDD	3330	2525.657	76		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	3470	2899.136	83		40-135	1.06	1.068
13C-OCDD	10200	5540.938	54		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1350	1124.408	83		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1410	1194.451	85		40-135	1.56	1.140
13C-1,2,3,4,7,8-HxCDF	3160	2493.609	79		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	3520	2855.269	81		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	131.594	164	Y	40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g

Data File Name: P205035
ICAL Date: 03/16/09

Date Analyzed: 11/18/09 0057
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	6.23	0.103	1.18	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	779.650	78		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	722.132	90		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g
Data File Name: P106087
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1327
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.29	0.105	1.17	0.79	1.000	1
1,2,3,7,8-PeCDD	21.0	0.207	2.93	1.66	1.000	1
1,2,3,4,7,8-HxCDD	43.0	0.432	2.93	1.28	0.999	1
1,2,3,6,7,8-HxCDD	347	0.392	2.93	1.26	1.000	1
1,2,3,7,8,9-HxCDD	121	0.415	2.93	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	13100 BE	17.6	2.93	1.05	1.000	1
OCDD	424000 BE	3.96	5.87	0.96	1.000	1
2,3,7,8-TCDF	31.1 C	0.261	1.17	0.77	1.001	1
1,2,3,7,8-PeCDF	10.0	0.807	2.93	1.65	1.001	1
2,3,4,7,8-PeCDF	17.4	0.798	2.93	1.62	1.025	1
1,2,3,4,7,8-HxCDF	106	0.199	2.93	1.26	1.000	1
1,2,3,6,7,8-HxCDF	41.4	0.190	2.93	1.34	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.254	2.93			1
2,3,4,6,7,8-HxCDF	56.6	0.217	2.93	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	3480 BE	7.29	2.93	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	270	10.2	2.93	1.06	1.034	1
OCDF	70200 BE	0.995	5.87	0.91	1.004	1
Total Tetra-Dioxins	306	0.105	1.17	0.80		1
Total Penta-Dioxins	180	0.207	2.93	1.57		1
Total Hexa-Dioxins	1830	0.392	2.93	1.25		1
Total Hepta-Dioxins	24900	17.6	2.93	1.05		1
Total Tetra-Furans	182	0.261	1.17	0.84		1
Total Penta-Furans	411	0.798	2.93	1.60		1
Total Hexa-Furans	992	0.190	2.93	1.28		1
Total Hepta-Furans	19400	7.29	2.93	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1117
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-29-110609	Units:	Percent
Lab Code:	R0906411-031	Basis:	Dry
		Percent Solids:	72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 1327
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.824g	Instrument Name:	E-HRMS-03
Data File Name:	P106087	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	713.608	71		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	702.727	70		40-135	1.55	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1575.001	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1245.532	50		40-135	1.05	1.068
13C-OCDD	5000	1002.458	20	Y	40-135	0.95	1.148
13C-2,3,7,8-TCDF	1000	742.902	74		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	685.746	69		40-135	1.62	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1703.458	68		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1406.950	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	665.021	83		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	9.29	0.105	1	1	9.29
1,2,3,7,8-PeCDD	21.0	0.207	1	1	21.0
1,2,3,4,7,8-HxCDD	43.0	0.432	1	0.1	4.30
1,2,3,6,7,8-HxCDD	347	0.392	1	0.1	34.7
1,2,3,7,8,9-HxCDD	121	0.415	1	0.1	12.1
1,2,3,4,6,7,8-HpCDD	19600	633	1000	0.01	196
OCDD	1120000	651	1000	0.0003	336
2,3,7,8-TCDF	11.3	0.0939	1	0.1	1.13
1,2,3,7,8-PeCDF	10.0	0.807	1	0.03	0.300
2,3,4,7,8-PeCDF	17.4	0.798	1	0.3	5.22
1,2,3,4,7,8-HxCDF	106	0.199	1	0.1	10.6
1,2,3,6,7,8-HxCDF	41.4	0.190	1	0.1	4.14
1,2,3,7,8,9-HxCDF	ND	0.254	1	0.1	
2,3,4,6,7,8-HxCDF	56.6	0.217	1	0.1	5.66
1,2,3,4,6,7,8-HpCDF	4230	189	1000	0.01	42.3
1,2,3,4,7,8,9-HpCDF	270	10.2	1	0.01	2.70
OCDF	83600	869	1000	0.0003	25.1

Total TEQ 711

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g

Data File Name: P106298
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2128
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	205	1170			1000
1,2,3,7,8-PeCDD	ND U	128	2930			1000
1,2,3,4,7,8-HxCDD	ND U	171	2930			1000
1,2,3,6,7,8-HxCDD	ND U	155	2930			1000
1,2,3,7,8,9-HxCDD	ND U	164	2930			1000
1,2,3,4,6,7,8-HpCDD	19600 B	633	2930	1.08	1.000	1000
OCDD	1120000 B	651	5870	0.89	1.000	1000
2,3,7,8-TCDF	ND U	152	1170			1000
1,2,3,7,8-PeCDF	ND U	149	2930			1000
2,3,4,7,8-PeCDF	ND U	148	2930			1000
1,2,3,4,7,8-HxCDF	ND U	191	2930			1000
1,2,3,6,7,8-HxCDF	ND U	183	2930			1000
1,2,3,7,8,9-HxCDF	ND U	245	2930			1000
2,3,4,6,7,8-HxCDF	ND U	209	2930			1000
1,2,3,4,6,7,8-HpCDF	4230 B	189	2930	1.03	1.000	1000
1,2,3,4,7,8,9-HpCDF	ND U	263	2930			1000
OCDF	83600 B	869	5870	0.84	1.004	1000

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g

Data File Name: P106298
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2128
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1410	1090.014	77		40-135	0.74	1.009
13C-1,2,3,7,8-PeCDD	1430	1170.652	82		40-135	1.57	1.180
13C-1,2,3,6,7,8-HxCDD	3970	2616.845	66		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	5000	3210.097	64		40-135	1.08	1.068
13C-OCDD	25000	5779.450	23	Y	40-135	0.88	1.147
13C-2,3,7,8-TCDF	1350	1178.548	87		40-135	0.75	0.978
13C-1,2,3,7,8-PeCDF	1450	1243.972	86		40-135	1.57	1.140
13C-1,2,3,4,7,8-HxCDF	3680	2655.664	72		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	4460	3268.125	73		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	1.366	171	Y	40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g
Data File Name: P205036
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0134
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	11.3	0.0939	1.17	0.76	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	757.199	76	40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	672.837	84	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g
Data File Name: P106088
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1415
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	6.80	0.163	1.26	0.73	1.001	1
1,2,3,7,8-PeCDD	15.7	0.230	3.14	1.52	1.000	1
1,2,3,4,7,8-HxCDD	27.2	1.27	3.14	1.28	0.998	1
1,2,3,6,7,8-HxCDD	149	1.16	3.14	1.25	1.000	1
1,2,3,7,8,9-HxCDD	81.1	1.22	3.14	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	5270 BE	5.39	3.14	1.05	1.000	1
OCDD	51700 BE	3.63	6.28	0.90	1.000	1
2,3,7,8-TCDF	32.8 C	0.194	1.26	0.76	1.001	1
1,2,3,7,8-PeCDF	7.78	1.22	3.14	1.73	1.001	1
2,3,4,7,8-PeCDF	13.7	1.21	3.14	1.68	1.025	1
1,2,3,4,7,8-HxCDF	66.8	0.326	3.14	1.25	1.000	1
1,2,3,6,7,8-HxCDF	31.1	0.312	3.14	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.351	3.14			1
2,3,4,6,7,8-HxCDF	37.7	0.357	3.14	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	1310 BE	6.82	3.14	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	94.5	9.48	3.14	1.07	1.034	1
OCDF	12000 BE	0.517	6.28	0.90	1.004	1
Total Tetra-Dioxins	115	0.163	1.26	0.77		1
Total Penta-Dioxins	158	0.230	3.14	1.58		1
Total Hexa-Dioxins	988	1.16	3.14	1.27		1
Total Hepta-Dioxins	10200	5.39	3.14	1.05		1
Total Tetra-Furans	192	0.194	1.26	0.83		1
Total Penta-Furans	309	1.21	3.14	1.60		1
Total Hexa-Furans	575	0.312	3.14	1.28		1
Total Hepta-Furans	5910	6.82	3.14	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1145
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-30-110609	Units:	Percent
Lab Code:	R0906411-032	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 1415
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.373g	Instrument Name:	E-HRMS-03
Data File Name:	P106088	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	655.561	66		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	629.697	63		40-135	1.54	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1569.998	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1511.288	60		40-135	1.06	1.068
13C-OCDD	5000	2197.991	44		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	699.337	70		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	613.169	61		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1702.144	68		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1510.204	60		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	603.783	75		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	6.80	0.163	1	1	6.80
1,2,3,7,8-PeCDD	15.7	0.230	1	1	15.7
1,2,3,4,7,8-HxCDD	27.2	1.27	1	0.1	2.72
1,2,3,6,7,8-HxCDD	149	1.16	1	0.1	14.9
1,2,3,7,8,9-HxCDD	81.1	1.22	1	0.1	8.11
1,2,3,4,6,7,8-HpCDD	5740	13.2	20	0.01	57.4
OCDD	62300	5.84	20	0.0003	18.7
2,3,7,8-TCDF	11.3	0.129	1	0.1	1.13
1,2,3,7,8-PeCDF	7.78	1.22	1	0.03	0.233
2,3,4,7,8-PeCDF	13.7	1.21	1	0.3	4.11
1,2,3,4,7,8-HxCDF	66.8	0.326	1	0.1	6.68
1,2,3,6,7,8-HxCDF	31.1	0.312	1	0.1	3.11
1,2,3,7,8,9-HxCDF	ND	0.351	1	0.1	
2,3,4,6,7,8-HxCDF	37.7	0.357	1	0.1	3.77
1,2,3,4,6,7,8-HpCDF	1290	5.90	20	0.01	12.9
1,2,3,4,7,8,9-HpCDF	94.5	9.48	1	0.01	0.945
OCDF	12500	6.31	20	0.0003	3.75

Total TEQ

161

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1145
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-30-110609	Units:	ng/Kg
Lab Code:	R0906411-032	Basis:	Dry
Run Type:	Dilution	Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/2/09 2216
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.373g	Instrument Name:	E-HRMS-03
Data File Name:	P106299	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	4.65	25.1			20
1,2,3,7,8-PeCDD	18.6 J	3.67	62.8	1.63	1.000	20
1,2,3,4,7,8-HxCDD	37.1 J	4.12	62.8	1.09	0.998	20
1,2,3,6,7,8-HxCDD	161	3.74	62.8	1.25	1.000	20
1,2,3,7,8,9-HxCDD	95.0	3.96	62.8	1.33	1.008	20
1,2,3,4,6,7,8-HpCDD	5740 B	13.2	62.8	1.06	1.000	20
OCDD	62300 BE	5.84	126	0.90	1.000	20
2,3,7,8-TCDF	30.4 C	4.54	25.1	0.86	1.001	20
1,2,3,7,8-PeCDF	ND U	4.83	62.8			20
2,3,4,7,8-PeCDF	ND U	4.79	62.8			20
1,2,3,4,7,8-HxCDF	67.4	4.19	62.8	1.39	1.000	20
1,2,3,6,7,8-HxCDF	26.6 J	4.01	62.8	1.18	1.003	20
1,2,3,7,8,9-HxCDF	ND U	5.37	62.8			20
2,3,4,6,7,8-HxCDF	23.7 JK	4.59	62.8	0.97	1.017	20
1,2,3,4,6,7,8-HpCDF	1290 B	5.90	62.8	1.05	1.000	20
1,2,3,4,7,8,9-HpCDF	117	8.20	62.8	1.08	1.033	20
OCDF	12500 B	6.31	126	0.89	1.004	20

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g

Data File Name: P106299
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2216
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1520	1059.588	70		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1590	1085.607	68		40-135	1.60	1.179
13C-1,2,3,6,7,8-HxCDD	3970	2553.201	64		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4170	3001.420	72		40-135	1.09	1.068
13C-OCDD	11400	5837.365	51		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1430	1135.221	79		40-135	0.76	0.978
13C-1,2,3,7,8-PeCDF	1640	1135.935	69		40-135	1.53	1.140
13C-1,2,3,4,7,8-HxCDF	3680	2512.709	68		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	4170	3068.897	74		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	28.283	71		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g
Data File Name: P205037
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0211
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	11.3	0.129	1.26	0.75	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	703.121	70		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	618.231	77		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106089
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1503
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	41.4	0.110	1.30	0.74	1.001	1
1,2,3,7,8-PeCDD	79.4	0.224	3.25	1.59	1.000	1
1,2,3,4,7,8-HxCDD	174	2.40	3.25	1.25	0.999	1
1,2,3,6,7,8-HxCDD	762 E	2.18	3.25	1.25	1.000	1
1,2,3,7,8,9-HxCDD	385	2.31	3.25	1.31	1.009	1
1,2,3,4,6,7,8-HpCDD	27900 BE	36.4	3.25	1.05	1.000	1
OCDD	232000 BE	3.95	6.50	0.96	1.000	1
2,3,7,8-TCDF	114 C	0.829	1.30	0.78	1.001	1
1,2,3,7,8-PeCDF	38.7	2.29	3.25	1.55	1.000	1
2,3,4,7,8-PeCDF	63.5	2.26	3.25	1.51	1.024	1
1,2,3,4,7,8-HxCDF	367	0.226	3.25	1.25	1.000	1
1,2,3,6,7,8-HxCDF	155	0.216	3.25	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.289	3.25			1
2,3,4,6,7,8-HxCDF	206	0.247	3.25	1.20	1.017	1
1,2,3,4,6,7,8-HpCDF	8340 BE	7.95	3.25	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	573	11.1	3.25	1.05	1.033	1
OCDF	92300 BE	0.860	6.50	0.90	1.004	1
Total Tetra-Dioxins	524	0.110	1.30	0.79		1
Total Penta-Dioxins	759	0.224	3.25	1.37		1
Total Hexa-Dioxins	5090	2.18	3.25	1.26		1
Total Hepta-Dioxins	55200	36.4	3.25	1.05		1
Total Tetra-Furans	747	0.829	1.30	0.76		1
Total Penta-Furans	1420	2.26	3.25	1.57		1
Total Hexa-Furans	3460	0.216	3.25	1.25		1
Total Hepta-Furans	37900	7.95	3.25	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106089
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1503
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	759.400	76		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	765.098	77		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1705.994	68		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1517.807	61		40-135	1.06	1.068
13C-OCDD	5000	1758.565	35	Y	40-135	0.92	1.149
13C-2,3,7,8-TCDF	1000	776.677	78		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	731.542	73		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1830.062	73		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1554.710	62		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	698.098	87		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	41.4	0.110	1	1	41.4
1,2,3,7,8-PeCDD	79.4	0.224	1	1	79.4
1,2,3,4,7,8-HxCDD	174	2.40	1	0.1	17.4
1,2,3,6,7,8-HxCDD	526	91.3	500	0.1	52.6
1,2,3,7,8,9-HxCDD	385	2.31	1	0.1	38.5
1,2,3,4,6,7,8-HpCDD	18700	245	500	0.01	187
OCDD	255000	285	500	0.0003	76.5
2,3,7,8-TCDF	41.0	0.256	1	0.1	4.10
1,2,3,7,8-PeCDF	38.7	2.29	1	0.03	1.16
2,3,4,7,8-PeCDF	63.5	2.26	1	0.3	19.1
1,2,3,4,7,8-HxCDF	367	0.226	1	0.1	36.7
1,2,3,6,7,8-HxCDF	155	0.216	1	0.1	15.5
1,2,3,7,8,9-HxCDF	ND	0.289	1	0.1	
2,3,4,6,7,8-HxCDF	206	0.247	1	0.1	20.6
1,2,3,4,6,7,8-HpCDF	5450	155	500	0.01	54.5
1,2,3,4,7,8,9-HpCDF	573	11.1	1	0.01	5.73
OCDF	57800	377	500	0.0003	17.3

Total TEQ 667

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Dilution
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106300
ICAL Date: 09/11/09
Date Analyzed: 12/2/09 2304
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	141	650			500
1,2,3,7,8-PeCDD	ND U	88.8	1620			500
1,2,3,4,7,8-HxCDD	ND U	101	1620			500
1,2,3,6,7,8-HxCDD	526 J	91.3	1620	1.25	1.000	500
1,2,3,7,8,9-HxCDD	378 JK	96.6	1620	1.04	1.008	500
1,2,3,4,6,7,8-HpCDD	18700 B	245	1620	1.00	1.000	500
OCDD	255000 B	285	3250	0.88	1.000	500
2,3,7,8-TCDF	ND U	127	650			500
1,2,3,7,8-PeCDF	ND U	96.4	1620			500
2,3,4,7,8-PeCDF	ND U	95.5	1620			500
1,2,3,4,7,8-HxCDF	ND U	119	1620			500
1,2,3,6,7,8-HxCDF	ND U	113	1620			500
1,2,3,7,8,9-HxCDF	ND U	152	1620			500
2,3,4,6,7,8-HxCDF	ND U	130	1620			500
1,2,3,4,6,7,8-HpCDF	5450 B	155	1620	1.14	1.000	500
1,2,3,4,7,8,9-HpCDF	ND U	216	1620			500
OCDF	57800 B	377	3250	0.91	1.004	500

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g

Data File Name: P106300
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2304
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1320	1056.989	80		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1300	1061.524	82		40-135	1.59	1.180
13C-1,2,3,6,7,8-HxCDD	3680	2693.254	73		40-135	1.29	0.992
13C-1,2,3,4,6,7,8-HpCDD	4100	3079.937	75		40-135	1.06	1.068
13C-OCDD	14300	5487.731	38	Y	40-135	0.88	1.146
13C-2,3,7,8-TCDF	1280	1125.550	88		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1370	1167.324	85		40-135	1.58	1.140
13C-1,2,3,4,7,8-HxCDF	3420	2850.027	83		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	4030	3278.754	81		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	1.154	72		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g

Data File Name: P205038
ICAL Date: 03/16/09

Date Analyzed: 11/18/09 0248
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	41.0	0.256	1.30	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	822.218	82		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	736.727	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: U133882
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2147
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	28.1	0.0299	1.25	0.77	1.001	1
1,2,3,7,8-PeCDD	55.4	0.159	3.13	1.59	1.000	1
1,2,3,4,7,8-HxCDD	96.6	0.516	3.13	1.18	0.998	1
1,2,3,6,7,8-HxCDD	451	0.459	3.13	1.17	1.000	1
1,2,3,7,8,9-HxCDD	302	0.484	3.13	1.17	1.008	1
1,2,3,4,6,7,8-HpCDD	14100 E	9.98	3.13	0.99	1.000	1
OCDD	103000 BE	0.275	6.26	0.97	1.000	1
2,3,7,8-TCDF	53.5 C	0.0713	1.25	0.82	1.001	1
1,2,3,7,8-PeCDF	23.3	0.549	3.13	1.73	1.001	1
2,3,4,7,8-PeCDF	32.3	0.512	3.13	1.66	1.024	1
1,2,3,4,7,8-HxCDF	176	0.480	3.13	1.33	1.000	1
1,2,3,6,7,8-HxCDF	79.4	0.467	3.13	1.28	1.003	1
1,2,3,7,8,9-HxCDF	1.74 J	0.599	3.13	1.13	1.037	1
2,3,4,6,7,8-HxCDF	110	0.519	3.13	1.32	1.016	1
1,2,3,4,6,7,8-HpCDF	3740 E	12.2	3.13	1.12	1.000	1
1,2,3,4,7,8,9-HpCDF	235	15.7	3.13	1.13	1.035	1
OCDF	36800 EP	0.214	6.26	0.91	1.004	1
Total Tetra-Dioxins	210	0.0299	1.25	0.79		1
Total Penta-Dioxins	279	0.159	3.13	1.60		1
Total Hexa-Dioxins	2890	0.459	3.13	1.18		1
Total Hepta-Dioxins	27000	9.98	3.13	0.99		1
Total Tetra-Furans	298	0.0713	1.25	0.83		1
Total Penta-Furans	635	0.512	3.13	1.64		1
Total Hexa-Furans	1690	0.467	3.13	1.31		1
Total Hepta-Furans	16900	12.2	3.13	1.12		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: U133882
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2147
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	717.118	72		40-135	0.75	1.008
13C-1,2,3,7,8-PeCDD	1000	545.678	55		40-135	1.36	1.171
13C-1,2,3,6,7,8-HxCDD	2500	1568.315	63		40-135	1.09	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1334.453	53		40-135	1.01	1.069
13C-OCDD	5000	1528.237	31	Y	40-135	0.81	1.152
13C-2,3,7,8-TCDF	1000	742.285	74		40-135	0.68	0.978
13C-1,2,3,7,8-PeCDF	1000	650.105	65		40-135	1.37	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1654.911	66		40-135	0.46	0.972
13C-1,2,3,4,6,7,8-HpCDF	2500	1280.593	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	584.360	73		40-135	NA	1.009

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	28.1	0.0299	1	1	28.1
1,2,3,7,8-PeCDD	55.4	0.159	1	1	55.4
1,2,3,4,7,8-HxCDD	96.6	0.516	1	0.1	9.66
1,2,3,6,7,8-HxCDD	451	0.459	1	0.1	45.1
1,2,3,7,8,9-HxCDD	302	0.484	1	0.1	30.2
1,2,3,4,6,7,8-HpCDD	17400	26.1	50	0.01	174
OCDD	317000	6.99	50	0.0003	95.1
2,3,7,8-TCDF	20.8	0.191	1	0.1	2.08
1,2,3,7,8-PeCDF	23.3	0.549	1	0.03	0.699
2,3,4,7,8-PeCDF	32.3	0.512	1	0.3	9.69
1,2,3,4,7,8-HxCDF	176	0.480	1	0.1	17.6
1,2,3,6,7,8-HxCDF	79.4	0.467	1	0.1	7.94
1,2,3,7,8,9-HxCDF	1.74	0.599	1	0.1	0.174
2,3,4,6,7,8-HxCDF	110	0.519	1	0.1	11.0
1,2,3,4,6,7,8-HpCDF	4620	21.1	50	0.01	46.2
1,2,3,4,7,8,9-HpCDF	235	15.7	1	0.01	2.35
OCDF	45400	6.02	50	0.0003	13.6

Total TEQ 549

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g

Data File Name: P205131
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0008
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	1.07	62.6			50
1,2,3,7,8-PeCDD	80.8 J	4.55	157	1.63	1.000	50
1,2,3,4,7,8-HxCDD	113 J	9.45	157	1.15	0.998	50
1,2,3,6,7,8-HxCDD	591	8.37	157	1.24	1.000	50
1,2,3,7,8,9-HxCDD	381	9.10	157	1.20	1.008	50
1,2,3,4,6,7,8-HpCDD	17400	26.1	157	1.03	1.000	50
OCDD	317000 BE	6.99	313	0.90	1.000	50
2,3,7,8-TCDF	ND U	4.16	62.6			50
1,2,3,7,8-PeCDF	ND U	10.4	157			50
2,3,4,7,8-PeCDF	ND U	10.3	157			50
1,2,3,4,7,8-HxCDF	227	36.5	157	1.15	1.000	50
1,2,3,6,7,8-HxCDF	106 J	35.1	157	1.17	1.004	50
1,2,3,7,8,9-HxCDF	ND U	45.7	157			50
2,3,4,6,7,8-HxCDF	130 J	39.2	157	1.23	1.017	50
1,2,3,4,6,7,8-HpCDF	4620	21.1	157	1.01	1.000	50
1,2,3,4,7,8,9-HpCDF	316	28.8	157	1.04	1.034	50
OCDF	45400	6.02	313	0.86	1.004	50

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g

Data File Name: P205131
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0008
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1390	1071.539	77		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1820	1223.733	67		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	3970	2375.348	60		40-135	1.22	0.992
13C-1,2,3,4,6,7,8-HpCDD	4720	3176.930	67		40-135	1.04	1.068
13C-OCDD	16100	6264.742	39	Y	40-135	0.89	1.147
13C-2,3,7,8-TCDF	1350	944.601	70		40-135	0.68	0.980
13C-1,2,3,7,8-PeCDF	1540	1132.583	74		40-135	1.52	1.135
13C-1,2,3,4,7,8-HxCDF	3790	2283.458	60		40-135	0.50	0.971
13C-1,2,3,4,6,7,8-HpCDF	4900	2805.030	57		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	14.071	88		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: P205049
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1125
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	20.8	0.191	1.25	0.77	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	721.140	72		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	643.455	80		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1415
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-33-110609	Units:	ng/Kg
Lab Code:	R0906411-035	Basis:	Dry
		Percent Solids:	74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/18/09 2235
Prep Method:	Method	Date Extracted:	11/12/09
Sample Amount:	10.645g	Instrument Name:	E-HRMS-01
Data File Name:	U133883	GC Column:	DB-5
ICAL Date:	07/31/09	Blank File Name:	P106111
		Cal Ver. File Name:	U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	18.2	0.0432	1.27	0.77	1.001	1
1,2,3,7,8-PeCDD	22.1	0.112	3.17	1.65	1.000	1
1,2,3,4,7,8-HxCDD	39.1	0.273	3.17	1.32	0.998	1
1,2,3,6,7,8-HxCDD	110	0.243	3.17	1.12	1.000	1
1,2,3,7,8,9-HxCDD	114	0.256	3.17	1.16	1.008	1
1,2,3,4,6,7,8-HpCDD	4040 E	3.30	3.17	0.98	1.000	1
OCDD	43100 BE	0.416	6.34	0.90	1.000	1
2,3,7,8-TCDF	32.4 C	0.156	1.27	0.83	1.001	1
1,2,3,7,8-PeCDF	12.4	0.879	3.17	1.74	1.000	1
2,3,4,7,8-PeCDF	15.1	0.819	3.17	1.66	1.023	1
1,2,3,4,7,8-HxCDF	80.3	0.439	3.17	1.31	1.000	1
1,2,3,6,7,8-HxCDF	31.8	0.428	3.17	1.32	1.003	1
1,2,3,7,8,9-HxCDF	2.00 JP	0.549	3.17	1.25	1.037	1
2,3,4,6,7,8-HxCDF	41.0	0.475	3.17	1.33	1.017	1
1,2,3,4,6,7,8-HpCDF	1190 E	2.74	3.17	1.11	1.000	1
1,2,3,4,7,8,9-HpCDF	77.6	3.53	3.17	1.11	1.034	1
OCDF	8730 EP	0.140	6.34	0.90	1.004	1
Total Tetra-Dioxins	162	0.0432	1.27	0.78		1
Total Penta-Dioxins	232	0.112	3.17	1.46		1
Total Hexa-Dioxins	1060	0.243	3.17	1.19		1
Total Hepta-Dioxins	8480	3.30	3.17	0.99		1
Total Tetra-Furans	169	0.156	1.27	0.82		1
Total Penta-Furans	215	0.819	3.17	1.66		1
Total Hexa-Furans	923	0.428	3.17	1.29		1
Total Hepta-Furans	5240	2.74	3.17	1.11		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: U133883
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2235
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	710.472	71		40-135	0.74	1.008
13C-1,2,3,7,8-PeCDD	1000	578.633	58		40-135	1.35	1.172
13C-1,2,3,6,7,8-HxCDD	2500	1418.597	57		40-135	1.09	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1428.767	57		40-135	1.01	1.069
13C-OCDD	5000	2003.117	40		40-135	0.79	1.151
13C-2,3,7,8-TCDF	1000	756.738	76		40-135	0.67	0.979
13C-1,2,3,7,8-PeCDF	1000	686.536	69		40-135	1.35	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1645.656	66		40-135	0.46	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1282.967	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	578.819	72		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035

Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	18.2	0.0432	1	1	18.2
1,2,3,7,8-PeCDD	22.1	0.112	1	1	22.1
1,2,3,4,7,8-HxCDD	39.1	0.273	1	0.1	3.91
1,2,3,6,7,8-HxCDD	110	0.243	1	0.1	11.0
1,2,3,7,8,9-HxCDD	114	0.256	1	0.1	11.4
1,2,3,4,6,7,8-HpCDD	4510	7.79	10	0.01	45.1
OCDD	55400	0.926	10	0.0003	16.6
2,3,7,8-TCDF	14.0	0.186	1	0.1	1.40
1,2,3,7,8-PeCDF	12.4	0.879	1	0.03	0.372
2,3,4,7,8-PeCDF	15.1	0.819	1	0.3	4.53
1,2,3,4,7,8-HxCDF	80.3	0.439	1	0.1	8.03
1,2,3,6,7,8-HxCDF	31.8	0.428	1	0.1	3.18
1,2,3,7,8,9-HxCDF	2.00	0.549	1	0.1	0.200
2,3,4,6,7,8-HxCDF	41.0	0.475	1	0.1	4.10
1,2,3,4,6,7,8-HpCDF	1370	8.78	10	0.01	13.7
1,2,3,4,7,8,9-HpCDF	77.6	3.53	1	0.01	0.776
OCDF	9940	0.993	10	0.0003	2.98

Total TEQ 168

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Dilution
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: P205132
ICAL Date: 08/01/08
Date Analyzed: 11/26/09 0056
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	19.8	0.567	12.7	0.81	1.001	10
1,2,3,7,8-PeCDD	24.1 J	0.501	31.7	1.35	1.000	10
1,2,3,4,7,8-HxCDD	40.2	1.21	31.7	1.25	0.999	10
1,2,3,6,7,8-HxCDD	154	1.08	31.7	1.27	1.000	10
1,2,3,7,8,9-HxCDD	130	1.17	31.7	1.25	1.009	10
1,2,3,4,6,7,8-HpCDD	4510	7.79	31.7	1.04	1.000	10
OCDD	55400 BE	0.926	63.4	0.89	1.000	10
2,3,7,8-TCDF	17.3 CK	0.783	12.7	0.47	1.001	10
1,2,3,7,8-PeCDF	13.1 JK	1.74	31.7	1.84	1.001	10
2,3,4,7,8-PeCDF	11.4 JK	1.72	31.7	1.93	1.025	10
1,2,3,4,7,8-HxCDF	78.0	9.78	31.7	1.07	1.000	10
1,2,3,6,7,8-HxCDF	27.3 JK	9.39	31.7	1.01	1.004	10
1,2,3,7,8,9-HxCDF	ND U	12.3	31.7			10
2,3,4,6,7,8-HxCDF	33.5 K	10.5	31.7	1.02	1.018	10
1,2,3,4,6,7,8-HpCDF	1370	8.78	31.7	0.99	1.000	10
1,2,3,4,7,8,9-HpCDF	96.4	12.0	31.7	1.06	1.034	10
OCDF	9940	0.993	63.4	0.89	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g

Data File Name: P205132
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0056
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1410	1013.920	72		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1720	1168.036	68		40-135	1.55	1.174
13C-1,2,3,6,7,8-HxCDD	4390	2252.182	51		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4390	2845.428	65		40-135	1.06	1.068
13C-OCDD	12500	5746.071	46		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1320	957.013	73		40-135	0.75	0.979
13C-1,2,3,7,8-PeCDF	1450	1091.606	75		40-135	1.53	1.135
13C-1,2,3,4,7,8-HxCDF	3790	2163.421	57		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	4900	2516.337	51		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	59.715	75		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: P205050
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1202
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	14.0	0.186	1.27	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	663.014	66		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	621.825	78		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.505g
Data File Name: U133884
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2322
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.26 J	0.0404	1.27	0.68	1.001	1
1,2,3,7,8-PeCDD	3.24	0.0503	3.19	1.62	1.000	1
1,2,3,4,7,8-HxCDD	4.71	0.124	3.19	1.09	0.999	1
1,2,3,6,7,8-HxCDD	15.8	0.110	3.19	1.15	1.000	1
1,2,3,7,8,9-HxCDD	15.0	0.116	3.19	1.19	1.009	1
1,2,3,4,6,7,8-HpCDD	450	0.838	3.19	0.99	1.000	1
OCDD	4730 BE	0.209	6.37	0.89	1.000	1
2,3,7,8-TCDF	6.09 C	0.0319	1.27	0.85	1.002	1
1,2,3,7,8-PeCDF	3.43	0.177	3.19	1.70	1.000	1
2,3,4,7,8-PeCDF	3.23	0.165	3.19	1.59	1.023	1
1,2,3,4,7,8-HxCDF	17.2	0.887	3.19	1.29	1.000	1
1,2,3,6,7,8-HxCDF	8.07	0.864	3.19	1.33	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.11	3.19			1
2,3,4,6,7,8-HxCDF	7.51	0.960	3.19	1.42	1.017	1
1,2,3,4,6,7,8-HpCDF	168	0.500	3.19	1.11	1.000	1
1,2,3,4,7,8,9-HpCDF	18.9	0.643	3.19	1.12	1.034	1
OCDF	850	0.120	6.37	0.90	1.004	1
Total Tetra-Dioxins	36.9	0.0404	1.27	0.75		1
Total Penta-Dioxins	47.6	0.0503	3.19	1.38		1
Total Hexa-Dioxins	149	0.110	3.19	1.17		1
Total Hepta-Dioxins	928	0.838	3.19	0.99		1
Total Tetra-Furans	37.1	0.0319	1.27	0.78		1
Total Penta-Furans	56.6	0.165	3.19	1.62		1
Total Hexa-Furans	170	0.864	3.19	1.32		1
Total Hepta-Furans	612	0.500	3.19	1.11		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1455
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-34-110609	Units:	Percent
Lab Code:	R0906411-036	Basis:	Dry
		Percent Solids:	74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/18/09 2322
Prep Method:	Method	Date Extracted:	11/12/09
Sample Amount:	10.505g	Instrument Name:	E-HRMS-01
Data File Name:	U133884	GC Column:	DB-5
ICAL Date:	07/31/09	Blank File Name:	P106111
		Cal Ver. File Name:	U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	667.753	67		40-135	0.74	1.008
13C-1,2,3,7,8-PeCDD	1000	571.622	57		40-135	1.36	1.172
13C-1,2,3,6,7,8-HxCDD	2500	1464.508	59		40-135	1.10	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1454.339	58		40-135	0.99	1.069
13C-OCDD	5000	2225.433	45		40-135	0.79	1.151
13C-2,3,7,8-TCDF	1000	674.951	67		40-135	0.67	0.978
13C-1,2,3,7,8-PeCDF	1000	658.260	66		40-135	1.36	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1654.670	66		40-135	0.46	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1263.410	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	546.687	68		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.26	0.0404	1	1	1.26
1,2,3,7,8-PeCDD	3.24	0.0503	1	1	3.24
1,2,3,4,7,8-HxCDD	4.71	0.124	1	0.1	0.471
1,2,3,6,7,8-HxCDD	15.8	0.110	1	0.1	1.58
1,2,3,7,8,9-HxCDD	15.0	0.116	1	0.1	1.50
1,2,3,4,6,7,8-HpCDD	450	0.838	1	0.01	4.50
OCDD	4730	0.209	1	0.0003	1.42
2,3,7,8-TCDF	2.64	0.116	1	0.1	0.264
1,2,3,7,8-PeCDF	3.43	0.177	1	0.03	0.103
2,3,4,7,8-PeCDF	3.23	0.165	1	0.3	0.969
1,2,3,4,7,8-HxCDF	17.2	0.887	1	0.1	1.72
1,2,3,6,7,8-HxCDF	8.07	0.864	1	0.1	0.807
1,2,3,7,8,9-HxCDF	ND	1.11	1	0.1	
2,3,4,6,7,8-HxCDF	7.51	0.960	1	0.1	0.751
1,2,3,4,6,7,8-HpCDF	168	0.500	1	0.01	1.68
1,2,3,4,7,8,9-HpCDF	18.9	0.643	1	0.01	0.189
OCDF	850	0.120	1	0.0003	0.255

Total TEQ 20.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.505g
Data File Name: P205051
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1238
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.64 K	0.116	1.27	0.93	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	616.524	62		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	560.376	70		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900466-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106031
ICAL Date: 09/11/09

Date Analyzed: 11/13/09 1917
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.149	1.00			1
1,2,3,7,8-PeCDD	ND U	0.138	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.124	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.112	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.119	2.50			1
1,2,3,4,6,7,8-HpCDD	ND U	0.158	2.50			1
OCDD	1.65 J	0.275	5.00	0.96	1.000	1
2,3,7,8-TCDF	ND U	0.126	1.00			1
1,2,3,7,8-PeCDF	ND U	0.155	2.50			1
2,3,4,7,8-PeCDF	ND U	0.154	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.0884	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.0844	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.114	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.0966	2.50			1
1,2,3,4,6,7,8-HpCDF	ND U	0.0833	2.50			1
1,2,3,4,7,8,9-HpCDF	ND U	0.116	2.50			1
OCDF	ND U	0.197	5.00			1
Total Tetra-Dioxins	ND U	0.149	1.00			1
Total Penta-Dioxins	ND U	0.138	2.50			1
Total Hexa-Dioxins	ND U	0.112	2.50			1
Total Hepta-Dioxins	ND U	0.158	2.50			1
Total Tetra-Furans	ND U	0.126	1.00			1
Total Penta-Furans	ND U	0.154	2.50			1
Total Hexa-Furans	ND U	0.0844	2.50			1
Total Hepta-Furans	ND U	0.0833	2.50			1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900466-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106031
ICAL Date: 09/11/09

Date Analyzed: 11/13/09 1917
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	557.887	56		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	615.432	62		40-135	1.48	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1546.438	62		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1469.177	59		40-135	1.03	1.068
13C-OCDD	5000	2107.678	42		40-135	0.87	1.149
13C-2,3,7,8-TCDF	1000	539.221	54		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	627.800	63		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1578.684	63		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1485.390	59		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	494.782	62		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900467-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106058
ICAL Date: 09/11/09

Date Analyzed: 11/16/09 1136
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106057

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.150	1.00			1
1,2,3,7,8-PeCDD	ND U	0.196	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.251	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.228	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.241	2.50			1
1,2,3,4,6,7,8-HpCDD	0.725 J	0.218	2.50	0.98	1.000	1
OCDD	2.90 J	0.434	5.00	0.98	1.000	1
2,3,7,8-TCDF	ND U	0.154	1.00			1
1,2,3,7,8-PeCDF	ND U	0.135	2.50			1
2,3,4,7,8-PeCDF	ND U	0.133	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.117	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.112	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.150	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.128	2.50			1
1,2,3,4,6,7,8-HpCDF	0.437 JK	0.156	2.50	1.24	1.000	1
1,2,3,4,7,8,9-HpCDF	ND U	0.217	2.50			1
OCDF	0.987 J	0.330	5.00	0.99	1.004	1
Total Tetra-Dioxins	ND U	0.150	1.00			1
Total Penta-Dioxins	ND U	0.196	2.50			1
Total Hexa-Dioxins	ND U	0.228	2.50			1
Total Hepta-Dioxins	0.725 J	0.218	2.50	0.98		1
Total Tetra-Furans	ND U	0.154	1.00			1
Total Penta-Furans	ND U	0.133	2.50			1
Total Hexa-Furans	ND U	0.112	2.50			1
Total Hepta-Furans	0.226 J	0.156	2.50	0.91		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900467-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106058
ICAL Date: 09/11/09

Date Analyzed: 11/16/09 1136
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106057

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	605.570	61		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	635.830	64		40-135	1.54	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1720.254	69		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1557.316	62		40-135	1.03	1.068
13C-OCDD	5000	2168.173	43		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	577.040	58		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	659.193	66		40-135	1.54	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1740.661	70		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1571.593	63		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	574.975	72		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900470-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106111
ICAL Date: 09/11/09

Date Analyzed: 11/18/09 1315
Date Extracted: 11/12/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P106105

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.0908	1.00			1
1,2,3,7,8-PeCDD	ND U	0.0743	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.0563	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.0511	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.0540	2.50			1
1,2,3,4,6,7,8-HpCDD	ND U	0.0886	2.50			1
OCDD	0.418 JK	0.134	5.00	1.26	1.000	1
2,3,7,8-TCDF	ND U	0.119	1.00			1
1,2,3,7,8-PeCDF	ND U	0.0631	2.50			1
2,3,4,7,8-PeCDF	ND U	0.0624	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.0455	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.0435	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.0583	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.0498	2.50			1
1,2,3,4,6,7,8-HpCDF	ND U	0.0602	2.50			1
1,2,3,4,7,8,9-HpCDF	ND U	0.0838	2.50			1
OCDF	ND U	0.129	5.00			1
Total Tetra-Dioxins	ND U	0.0908	1.00			1
Total Penta-Dioxins	ND U	0.0743	2.50			1
Total Hexa-Dioxins	ND U	0.0511	2.50			1
Total Hepta-Dioxins	ND U	0.0886	2.50			1
Total Tetra-Furans	ND U	0.119	1.00			1
Total Penta-Furans	ND U	0.0624	2.50			1
Total Hexa-Furans	ND U	0.0435	2.50			1
Total Hepta-Furans	ND U	0.0602	2.50			1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900470-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Date Analyzed: 11/18/09 1315
Date Extracted: 11/12/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P106105

Data File Name: P106111
ICAL Date: 09/11/09

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	695.819	70		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	733.246	73		40-135	1.57	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1628.274	65		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1642.854	66		40-135	1.05	1.069
13C-OCDD	5000	2524.997	50		40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	724.227	72		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	790.531	79		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1639.645	66		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1481.584	59		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	631.862	79		40-135	NA	1.010

Comments: _____

**SAUGET/E. ST. LOUIS RESIDENTIAL PCB/DIOXIN SAMPLING
SAUGET AND E. ST. LOUIS, ILLINOIS
DATA VALIDATION REPORT
FOR PCB CONGENER DATA**

Date: February 4, 2010

Laboratory: Columbia Analytical Services (CAS), Houston, Texas

Laboratory Work Order #: E1000009

Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START)

Weston Analytical Work Order #/TDD #: 20405.016.008.0828.00/S05-0008-0910-033

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 13 soil samples collected for the Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site (Sauget) that were analyzed for the 12 PCB congeners that were indicated by the World Health Organization (WHO) to contain dioxin-like properties. The PCB congener analysis was conducted using U.S. Environmental Protection Agency (U.S. EPA) Method 1668A.

A quality assurance (QA) level IV data package was received from CAS. The data validation was conducted in general accordance with the U.S. EPA Analytical Services Branch "National Functional Guidelines for Chlorinated Dibenz-p-Dioxins and Chlorinated Dibenzofurans Data Review" dated September 2005. The attachment contains the results summary sheets.

PCB CONGENERS BY U.S. EPA METHOD 1668A

1. Samples

The following table summarizes the soil samples for which this data validation was conducted.

Samples	Lab ID	Date Collected	Date Extracted	Date Analyzed
SE-SS-04-110409	E1000009-001	11/04/2009	1/8/2010	1/15/2010 – 1/25/2010
SE-SS-12-110409	E1000009-002	11/04/2009	1/8/2010	1/15/2010
SE-SS-14-110509	E1000009-003	11/04/2009	1/8/2010	1/15/2010 – 1/25/2010
SE-SS-15-110509	E1000009-004	11/04/2009	1/8/2010	1/15/2010 – 1/25/2010
SE-SS-17-110509	E1000009-005	11/04/2009	1/8/2010	1/15/2010
SE-SS-19-110509	E1000009-006	11/04/2009	1/8/2010	1/15/2010
SE-SS-20-110509	E1000009-007	11/04/2009	1/8/2010	1/15/2010
SE-SS-21-110509	E1000009-008	11/04/2009	1/8/2010	1/15/2010
SE-SS-23-110509	E1000009-009	11/04/2009	1/8/2010	1/15/2010
SE-SS-23-110509-D	E1000009-010	11/04/2009	1/8/2010	1/15/2010
SE-SS-25-110609	E1000009-011	11/04/2009	1/8/2010	1/15/2010
SE-SS-31-110609	E1000009-012	11/04/2009	1/8/2010	1/16/2010 – 1/25/2010
SE-SS-32-110609	E1000009-013	11/04/2009	1/8/2010	1/16/2010 – 1/25/2010

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: E1000009

2. Holding Times

Method 1668A states that there are no demonstrated holding times for PCB congeners but that soil samples must be stored at less than 6°C in the dark from the time of collection until extraction for up to a period of one year. Samples were stored properly and analyzed within the one-year recommended limit.

3. System Performance Checks

The perfluorokerosene (PFK) standards were checked manually and it was verified that the resolving power was approximately 10,000.

The chromatographic peak separation between the PCB 34 and 23 and PCB 187 and 182 was resolved with a valley of $\leq 40\%$.

The continuing calibration standards meet the quality control (QC) criteria for relative retention time (RRT) and ion abundance ratio.

4. Initial Calibration Results

The relative standard deviations (RSD) for the relative response factors (RRF) were less than 20 percent for the unlabeled PCB compounds as required.

5. Continuing Calibration Results

The recoveries of the labeled and unlabeled PCB congeners were within the limits specified in Method 1668A.

6. Identification Criteria

The following identification criteria have been spot-checked for in the investigative samples associated with this work order.

- The RRTs for the peaks for individual PCB congeners were within the appropriate RRT windows.
- From the SICPs, it was verified that for each analyte ion listed, the S/N ratio is $\geq 2.5:1$.
- The ion abundance ratios are within the criteria listed in Table 8 of Method 1668A. In a few instances, the ion abundance ratio criteria were not met; however, in these instances

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: E1000009

the laboratory flagged the results with a “K” and the estimated maximum possible concentration (EMPC) for the analyte was reported.

7. Blanks

A method blank was analyzed with the samples and was free of target compound contamination above the reporting limit. The following compounds were detected in the method blank below the reporting limit:

- PCB 77 at 2.18 nanogram per kilogram (ng/kg);
- PCB 118 at 38.1 ng/kg;
- PCB 105 at 12.7 ng/kg;
- PCB 167 at 2.76 ng/kg; and
- PCB 156+157 at 6.73 ng/kg.

No qualifications were applied because of these minor method blank concentrations. All detected results were much greater than the method blank concentrations.

8. Laboratory Control Sample (LCS) Results

The LCS and LCS duplicate recoveries were within the laboratory-established QC limits for percent recovery and relative percent difference (RPD).

9. Compound Quantitation

A spot-check of compound quantitation was performed. Compound quantitation appears to have been performed correctly based on the spot-check.

The individual and TEQ concentrations were calculated correctly using the appropriate toxicity equivalency factors (TEF).

The recoveries of the internal standards (labeled compounds) were mostly within the QC limits. There were only a few exceptions where the recovery was slightly exceeded. In these instances, the signal to noise ration was acceptable; therefore, the sample results are acceptable for use.

The initial analysis of several samples exceeded the upper calibration range. The laboratory flagged these results with an “E” and performed dilutions and re-analyses. The sample results that should be utilized are those listed for the TEQ calculations.

Data Validation Report
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
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10. Field Duplicate Results

Sample SE-SS23-110509-D is a field duplicate of sample SE-SS23-110509. The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. Note that there is no established QC limit for RPD for field duplicates; however, 50 RPD is generally used for evaluation. The RPDs ranged from 2 to 28 percent which is acceptable.

11. Overall Assessment of Data

The data are acceptable use as qualified based on the information received. All laboratory qualifications are accepted and should accompany the reporting of data. Note that the laboratory flagged those compounds detected below the reporting limit with a "J" to indicate that these results should be considered estimated.

ATTACHMENT

CAS

RESULTS SUMMARY WITH QUALIFIERS

January 28, 2010

Service Request No: E1000009

Ms. Lisa Graczyk/Dynamac
Weston Solutions, Inc.
20 North Wacker Drive, Suite 1210
Chicago, IL 60606

Laboratory Results for: Sauget E. St. Louis/20405.016.008.0828.00

Dear Ms. Graczyk/Dynamac:

Enclosed are the results of the sample(s) submitted to our laboratory on November 10, 2009. For your reference, these analyses have been assigned our service request number **E1000009**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided.

All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the final complete report. Results apply only to the items

submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2957. You may also contact me via email at JFreemyer@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jane Freemyer
Project Manager; GC/HRMS

Page 1 of _____

For a specific list of NELAP-accredited analytes, refer to the certifications section at
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Certificate of Analysis

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COLUMBIA ANALYTICAL SERVICES, INC

Client: Weston Solutions, Inc **Service Request No.:** E1000009
Project: Sauget E. St. Louis/20405.016.008.0828.00 **Date Received:** 11/10/09
Sample Matrix: Soil

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirteen soil samples were received for analysis at Columbia Analytical Services on 11/10/09.

The samples were received at 2C in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a freezer at -21C upon receipt at the laboratory.

Data Validation Notes and Discussion

B flags – Method Blanks

The Method Blank EQ1000008-01/U221939 contained PCB-77, PCB-118, PCB-105, PCB-167 and PCB-156+157 below the Method Reporting Limit (MRL).

The associated compounds in the samples are flagged with 'B' flags.

Y flags – Labeled Standards

Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.

MS/DMS

EQ1000008: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/DMS for this extraction batch.

MRL

Samples SE-SS-04-110409, SE-SS-14-110509, SE-SS-15-110509, SE-SS-31-110609 and SE-SS-32-110609 required dilutions due to the presence of elevated levels of target analytes. The undiluted and diluted results were combined into one Total TEQ summary report for each sample. This reports a 'Total' result that includes the most appropriate concentration found for the associated target analyte.

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

For dilutions, we adjust the concentration of the labeled compounds to 100pg/uL in the extract, as required in Section 17.5 of Method 1668A. The clean-up standard concentration is not adjusted with the labeled standards, as the clean-up standard measures the extraction recoveries in the 1:1 extract. Please disregard the recoveries for the clean-up standard in the dilutions.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each congener in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by CAS/Houston to include:

- [The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds](#) (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'
- The 1:1 and associated dilution have been combined into one TEQ Summary report

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

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EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

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- Non-detected compounds are not included in the 'Total'
- The 1:1 and associated dilution have been combined into one TEQ Summary report

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

Client: Weston Solutions, Inc.
Project: Sauget E. St. Louis/20405.016.008.0828.00

Service Request: E1000009

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
E1000009-001	SE-SS-04-110409	11/4/09	11:26
E1000009-002	SE-SS-12-110409	11/4/09	17:15
E1000009-003	SE-SS-14-110509	11/5/09	09:17
E1000009-004	SE-SS-15-110509	11/5/09	09:58
E1000009-005	SE-SS-17-110509	11/5/09	12:10
E1000009-006	SE-SS-19-110509	11/5/09	14:40
E1000009-007	SE-SS-20-110509	11/5/09	15:10
E1000009-008	SE-SS-21-110509	11/5/09	15:40
E1000009-009	SE-SS-23-110509	11/5/09	16:50
E1000009-010	SE-SS-23-110509-D	11/5/09	16:50
E1000009-011	SE-SS-25-110609	11/6/09	09:09
E1000009-012	SE-SS-31-110609	11/6/09	13:08
E1000009-013	SE-SS-32-110609	11/6/09	13:35

Superset Summary

Service Request: E1000009

SuperSet Reference: 10-0000133273 rev 00

1668A/Cl Biphen Cong

Calibrations: 10/19/09

Data Files:

<i>Raw Data</i>	<i>Begin CCAL</i>	<i>Method Blank</i>	<i>Lab ID</i>
U221933	U221926	U221939	E1000009-001.R01
U221934	U221926	U221939	E1000009-002
U221935	U221926	U221939	E1000009-003.R01
U221936	U221926	U221939	E1000009-004.R01
U221939	U221938	U221939	EQ1000008-01
U221940	U221938	U221939	E1000009-005
U221941	U221938	U221939	E1000009-006
U221942	U221938	U221939	E1000009-007
U221943	U221938	U221939	E1000009-008
U221947	U221944	U221939	E1000009-009
U221948	U221944	U221939	E1000009-010
U221949	U221944	U221939	E1000009-011
U221950	U221944	U221939	E1000009-012.R01
U221951	U221944	U221939	E1000009-013.R01
U221952	U221944	U221939	EQ1000008-02
U221953	U221944	U221939	EQ1000008-03
U222001	U221996	U221939	E1000009-001
U222002	U221996	U221939	E1000009-003
U222007	U222003	U221939	E1000009-004
U222008	U222003	U221939	E1000009-012
U222009	U222003	U221939	E1000009-013

CAS SOP/Total Solids

Calibrations:

Data Files:

<i>Raw Data</i>	<i>Begin CCAL</i>	<i>Method Blank</i>	<i>Lab ID</i>

Laboratory Certifications

2009-2010

STATE/PROGRAM	AGENCY	CERTIFICATION ID	EXP DATE
ARIZONA	AZ-DHS	AZ0725	05/26/10
ARKANSAS	ADEQ	09-048-0	06/16/10
CALIFORNIA	CA-ELAP	2452	02/28/11
FLORIDA/NELAP	FL-DOHS	E87611	06/30/10
HAWAII	HI-DOH	N/A	06/30/10
ILLINOIS/NELAP	IL-EPA	002380	10/06/10
LOUISIANA/NELAP	LELAP	03048	06/30/10
MAINE	ME-DOHS	2008031	06/05/10
MICHIGAN	MIDEQ	9971	06/30/10
MINNESOTA	MDH	048-999-427	03/25/10
NEVADA	NDEP	TX014112009A	07/31/10
NEW JERSEY	NJDEP	TX008	06/30/10
NEW MEXICO	NMED-DWB	N/A	06/30/10
NEW YORK/NELAP	NY-DOH	11707	03/31/10
NFESC/NAVY	NFESC	N/A	01/09/10
OKLAHOMA	OKDEQ	2009-25	08/31/10
OREGON/NELAP	ORELAP	TX200002-006	03/24/10
TENNESSEE	TNDEC	04016	06/30/10
TEXAS/NELAP	TCEQ	T104704216-09-TX	06/30/10
UTAH/NELAP	UTELCP	COLU2	06/30/10
SOIL IMPORT PERMIT	USDA	P330-09-00067	03/27/12
WASHINGTON/NELAP	WA-Ecology	C1855	11/14/10
WEST VIRGINIA	WVDEP	347	06/30/10

Abbreviations, Acronyms & Definitions

Cal	Calibration
Conc	CONCentratiOn
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
MRL	Method Reporting Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent Recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
RRT	Relative Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-Noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

Data Qualifier Flags – Dioxin/Furans

- **B** Indicates the associated analyte is found in the method blank, as well as in the sample.
- **C** Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225). The results from both the DB-5 column and the DB-225 column are included in this data package. The results from the DB-225 analyses should be used to evaluate the 2378-TCDF in the samples. The confirmed result should be used in determining the TEQ value for TCDF.
- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range.
- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the estimated detection limit (EDL).
- **K** EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.
- **U** Indicates the compound was analyzed and not detected.
- **Y** Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y'. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.
- **ND** Indicates concentration is reported as 'Not Detected.'
- **S** Peak is saturated; data not reportable.
- **P** Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
- **Q** Lock-mass interference by chlorodiphenyl ether compounds.

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

E100009

First Level - Data Processing - to be filled by person generating the forms

Date	01/20/10	Person 1	MC (009-013)
Date		Person 2	

Second Level - Data Review – to be filled by person doing peer review

Date	01/21/10	Primary Data Reviewer	
Date		Secondary Data Reviewer	

Project Level - Review – to be filled by person doing project compliance review

Date	Reviewer
------	----------

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

E100009

First Level - Data Processing - to be filled by person generating the forms

Date

01/20/10

Person 1

mc (001-004)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

1/22/10

Primary Data Reviewer

gc (001-004)

Date

Secondary Data Reviewer

gc (001-004)

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

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SR# Unique ID

E1000009

First Level - Data Processing - to be filled by person generating the forms

Date

01/21/10

Person 1

mc (605-008)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

01/22/10

Primary Data Reviewer

SA

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

E1000009

First Level - Data Processing - to be filled by person generating the forms

Date

01/26/10

Person 1

MC(09IDL,003PL)

Date

Person 2

Second Level - Data Review – to be filled by person doing peer review

Date

1/28/10

Primary Data Reviewer

QC(09IDL,003dl)

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

100009

First Level - Data Processing - to be filled by person generating the forms

Date

01/27/10

Person 1

MC (004DL, 012DL, 013DL)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

01/28/10

Primary Data Reviewer

SA

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer



Analytical Results

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: E1000009-001
Service Request: E1000009
Date Collected: 11/4/09 1126
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.3

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.190g
Data File Name: U221933
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 0105
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	90.7 J	4.40	121	0.85	1.000	1
PCB 77	1830 B	5.33	121	0.80	1.001	1
PCB 123	5130	13.6	121	1.58	1.000	1
PCB 118	102000 BEK	12.7	121	1.16	1.000	1
PCB 114	1890	13.3	121	1.55	1.000	1
PCB 105	71100 BE	13.8	48.6	1.52	1.001	1
PCB 126	355	14.8	121	1.58	1.001	1
PCB 167	19900 BE	33.3	121	1.27	1.001	1
PCBs 156 + 157	58400 BE	49.4	121	1.26	1.000	1
PCB 169	185	40.1	121	1.33	0.999	1
PCB 189	2420	46.8	121	1.00	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: E1000009-001

Service Request: E1000009
Date Collected: 11/4/09 1126
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 79.3

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.190g
Data File Name: U221933
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 0105
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2107.980	105		25-150	0.79	1.327
PCB 77L	2000	1835.353	92		25-150	0.80	1.347
PCB 123L	2000	1639.003	82		25-150	1.61	1.135
PCB 118L	2000	1892.036	95		25-150	1.54	1.145
PCB 114L	2000	1620.668	81		25-150	1.54	1.160
PCB 105L	2000	1728.564	86		25-150	1.57	1.179
PCB 126L	2000	1762.214	88		25-150	1.57	1.268
PCB 167L	2000	1346.964	67		25-150	1.25	1.070
PCBs 156L + 157L	4000	2707.285	68		25-150	1.28	1.097
PCB 169L	2000	1315.392	66		25-150	1.27	1.173
PCB 189L	2000	1494.049	75		25-150	1.01	0.962
PCB 111L	2000	1550.423	78		30-135	1.58	1.077
PCB 178L	2000	1260.961	63		30-135	1.04	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: E1000009-001

Service Request: E1000009
Date Collected: 11/4/09 1126
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	90.7	4.40	1	0.0003	0.0272
PCB 77	1830	5.33	1	0.0001	0.183
PCB 123	5130	13.6	1	0.00003	0.154
PCB 118	273000	195	30	0.00003	8.19
PCB 114	1890	13.3	1	0.00003	0.0567
PCB 105	99300	246	30	0.00003	2.98
PCB 126	355	14.8	1	0.1	35.5
PCB 167	33100	125	30	0.00003	0.993
PCBs 156 + 157	94300	180	30	0.00003	2.83
PCB 169	185	40.1	1	0.03	5.55
PCB 189	2420	46.8	1	0.00003	0.0726
Total TEQ					56.5

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: E1000009-001
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/4/09 1126
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.3

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.190g
Data File Name: U222001
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 1411
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221996

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	ND U	49.1	3640			30
PCB 77	ND U	57.6	3640			30
PCB 123	ND U	247	3640			30
PCB 118	273000 B	195	3640	1.61	1.001	30
PCB 114	ND U	249	3640			30
PCB 105	99300 B	246	1460	1.60	1.001	30
PCB 126	ND U	256	3640			30
PCB 167	33100 B	125	3640	1.27	1.000	30
PCBs 156 + 157	94300 B	180	3640	1.27	1.000	30
PCB 169	ND U	153	3640			30
PCB 189	ND U	119	3640			30

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: E1000009-001
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/4/09 1126
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 79.3

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.190g
Data File Name: U222001
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 1411
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221996

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	3039.521	152		25-150	0.78	1.327
PCB 77L	2170	2939.519	135		25-150	0.81	1.348
PCB 123L	2440	3098.252	127		25-150	1.61	1.136
PCB 118L	2110	3236.091	154	Y	25-150	1.60	1.145
PCB 114L	2470	3007.078	122		25-150	1.62	1.161
PCB 105L	2330	3073.781	132		25-150	1.62	1.180
PCB 126L	2270	3290.351	145		25-150	1.55	1.269
PCB 167L	2990	2492.676	84		25-150	1.25	1.070
PCBs 156L + 157L	5880	5212.104	89		25-150	1.27	1.098
PCB 169L	3030	2534.990	84		25-150	1.27	1.174
PCB 189L	2670	2315.649	87		25-150	1.05	0.962
PCB 111L	2560	67.871	3	Y	30-135	1.68	1.078
PCB 178L	3170	66.561	2	Y	30-135	1.04	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: E1000009-002
Service Request: E1000009
Date Collected: 11/4/09 1715
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.060g
Data File Name: U221934
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 0213
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	119 J	2.09	125	0.86	1.000	1
PCB 77	1510 B	2.28	125	0.79	1.001	1
PCB 123	683	80.6	125	1.53	1.000	1
PCB 118	22400 BE	73.8	125	1.60	1.001	1
PCB 114	826	80.3	125	1.55	1.001	1
PCB 105	15100 BE	83.4	49.9	1.61	1.000	1
PCB 126	279	85.7	125	1.56	1.000	1
PCB 167	2150 B	24.7	125	1.26	1.001	1
PCBs 156 + 157	6800 B	35.7	125	1.25	1.000	1
PCB 169	59.1 J	29.6	125	1.28	0.999	1
PCB 189	627	12.7	125	1.02	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: E1000009-002

Service Request: E1000009
Date Collected: 11/4/09 1715
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 79.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.060g
Data File Name: U221934
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 0213
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	963.680	48		25-150	0.79	1.327
PCB 77L	2000	934.577	47		25-150	0.79	1.348
PCB 123L	2000	854.029	43		25-150	1.58	1.135
PCB 118L	2000	894.549	45		25-150	1.56	1.144
PCB 114L	2000	841.285	42		25-150	1.59	1.160
PCB 105L	2000	875.066	44		25-150	1.54	1.179
PCB 126L	2000	930.565	47		25-150	1.56	1.268
PCB 167L	2000	707.521	35		25-150	1.26	1.070
PCBs 156L + 157L	4000	1447.821	36		25-150	1.25	1.098
PCB 169L	2000	707.433	35		25-150	1.29	1.173
PCB 189L	2000	729.506	36		25-150	1.02	0.962
PCB 111L	2000	779.552	39		30-135	1.57	1.078
PCB 178L	2000	652.808	33		30-135	1.03	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: E1000009-002

Service Request: E1000009
Date Collected: 11/4/09 1715
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	119	2.09	1	0.0003	0.0357
PCB 77	1510	2.28	1	0.0001	0.151
PCB 123	683	80.6	1	0.00003	0.0205
PCB 118	22400	73.8	1	0.00003	0.672
PCB 114	826	80.3	1	0.00003	0.0248
PCB 105	15100	83.4	1	0.00003	0.453
PCB 126	279	85.7	1	0.1	27.9
PCB 167	2150	24.7	1	0.00003	0.0645
PCBs 156 + 157	6800	35.7	1	0.00003	0.204
PCB 169	59.1	29.6	1	0.03	1.77
PCB 189	627	12.7	1	0.00003	0.0188
Total TEQ					31.3

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: E1000009-003
Service Request: E1000009
Date Collected: 11/5/09 0917
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.237g
Data File Name: U221935
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 0321
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	77.8 J	6.00	123	0.87	1.000	1
PCB 77	1220 B	6.53	123	0.80	1.000	1
PCB 123	1270	51.8	123	1.57	1.000	1
PCB 118	63200 BE	47.4	123	1.60	1.001	1
PCB 114	1780	52.2	123	1.56	1.001	1
PCB 105	30500 BE	52.8	49.1	1.56	1.000	1
PCB 126	102 J	58.1	123	1.65	1.001	1
PCB 167	3540 B	37.1	123	1.26	1.000	1
PCBs 156 + 157	11900 BE	52.8	123	1.27	1.000	1
PCB 169	53.6 J	44.9	123	1.30	0.999	1
PCB 189	579	11.9	123	0.92	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: E1000009-003

Service Request: E1000009
Date Collected: 11/5/09 0917
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 77.8

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.237g
Data File Name: U221935
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 0321
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	1989.126	99		25-150	0.78	1.328
PCB 77L	2000	1957.895	98		25-150	0.79	1.348
PCB 123L	2000	1742.004	87		25-150	1.56	1.135
PCB 118L	2000	1867.694	93		25-150	1.53	1.144
PCB 114L	2000	1732.954	87		25-150	1.58	1.160
PCB 105L	2000	1822.387	91		25-150	1.58	1.179
PCB 126L	2000	1869.351	93		25-150	1.52	1.268
PCB 167L	2000	1525.263	76		25-150	1.28	1.070
PCBs 156L + 157L	4000	3190.483	80		25-150	1.27	1.097
PCB 169L	2000	1536.665	77		25-150	1.25	1.174
PCB 189L	2000	1592.054	80		25-150	1.06	0.962
PCB 111L	2000	1563.237	78		30-135	1.55	1.078
PCB 178L	2000	1425.554	71		30-135	1.02	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: E1000009-003

Service Request: E1000009
Date Collected: 11/5/09 0917
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	77.8	6.00	1	0.0003	0.0233
PCB 77	1220	6.53	1	0.0001	0.122
PCB 123	1270	51.8	1	0.00003	0.0381
PCB 118	74000	76.9	20	0.00003	2.22
PCB 114	1780	52.2	1	0.00003	0.0534
PCB 105	34500	88.4	20	0.00003	1.04
PCB 126	102	58.1	1	0.1	10.2
PCB 167	3540	37.1	1	0.00003	0.106
PCBs 156 + 157	14800	133	20	0.00003	0.444
PCB 169	53.6	44.9	1	0.03	1.61
PCB 189	579	11.9	1	0.00003	0.0174

Total TEQ

15.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: E1000009-003
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/5/09 0917
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.237g
Data File Name: U222002
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 1519
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221996

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	ND U	35.1	2450			20
PCB 77	ND U	38.7	2450			20
PCB 123	ND U	90.6	2450			20
PCB 118	74000 B	76.9	2450	1.59	1.000	20
PCB 114	ND U	89.0	2450			20
PCB 105	34500 B	88.4	982	1.57	1.001	20
PCB 126	ND U	90.5	2450			20
PCB 167	ND U	96.5	2450			20
PCBs 156 + 157	14800 B	133	2450	1.27	1.000	20
PCB 169	ND U	111	2450			20
PCB 189	ND U	75.2	2450			20

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: E1000009-003
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/5/09 0917
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 77.8

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.237g
Data File Name: U222002
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 1519
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221996

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2020	3028.504	150		25-150	0.79	1.328
PCB 77L	2040	2958.443	145		25-150	0.81	1.349
PCB 123L	2300	2985.416	130		25-150	1.58	1.135
PCB 118L	2150	3098.001	144		25-150	1.63	1.145
PCB 114L	2300	2930.811	127		25-150	1.58	1.160
PCB 105L	2200	2985.034	136		25-150	1.59	1.180
PCB 126L	2150	3271.701	152	Y	25-150	1.57	1.269
PCB 167L	2630	2465.382	94		25-150	1.27	1.070
PCBs 156L + 157L	5000	5256.698	105		25-150	1.28	1.098
PCB 169L	2600	2591.562	100		25-150	1.29	1.174
PCB 189L	2500	2248.073	90		25-150	1.07	0.962
PCB 111L	2560	91.769	4	Y	30-135	1.59	1.078
PCB 178L	2820	73.158	3	Y	30-135	1.02	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-110509
Lab Code: E1000009-004
Service Request: E1000009
Date Collected: 11/5/09 0958
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.196g
Data File Name: U221936
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 0429
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221926

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	436	10.7	124	0.85	1.000	1
PCB 77	12400 BE	12.9	124	0.79	1.001	1
PCB 123	9570	33.3	124	1.58	1.001	1
PCB 118	135000 BEK	32.4	124	1.12	1.000	1
PCB 114	8240	33.3	124	1.57	1.001	1
PCB 105	128000 BEK	34.6	49.7	1.19	1.000	1
PCB 126	2240	38.8	124	1.58	1.001	1
PCB 167	28300 BE	41.1	124	1.26	1.000	1
PCBs 156 + 157	86300 BE	65.6	124	1.26	1.000	1
PCB 169	181	51.1	124	1.40	0.999	1
PCB 189	2960	25.3	124	1.02	1.001	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	E1000009
Project:	Sauget E. St. Louis/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/10/09
Sample Name:	SE-SS-15-110509	Units:	Percent
Lab Code:	E1000009-004	Basis:	Dry
		Percent Solids:	77.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method:	1668A	Date Analyzed:	1/15/10 0429
Prep Method:	Method	Date Extracted:	1/8/10
Sample Amount:	5.196g	Instrument Name:	E-HRMS-02
Data File Name:	U221936	GC Column:	SPB-OCTYL
ICAL Date:	10/19/09	Blank File Name:	U221939
		Cal Ver. File Name:	U221926

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2166.567	108		25-150	0.82	1.327
PCB 77L	2000	1872.897	94		25-150	0.79	1.348
PCB 123L	2000	1611.368	81		25-150	1.58	1.134
PCB 118L	2000	1973.740	99		25-150	1.54	1.145
PCB 114L	2000	1592.860	80		25-150	1.59	1.160
PCB 105L	2000	1779.882	89		25-150	1.56	1.179
PCB 126L	2000	1633.872	82		25-150	1.60	1.268
PCB 167L	2000	1349.617	67		25-150	1.26	1.070
PCBs 156L + 157L	4000	2411.219	60		25-150	1.25	1.097
PCB 169L	2000	1268.840	63		25-150	1.25	1.173
PCB 189L	2000	1580.297	79		25-150	1.03	0.962
PCB 111L	2000	1545.705	77		30-135	1.56	1.077
PCB 178L	2000	1388.551	69		30-135	1.03	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-110509
Lab Code: E1000009-004

Service Request: E1000009
Date Collected: 11/5/09 0958
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	436	10.7	1	0.0003	0.131
PCB 77	13900	73.7	50	0.0001	1.39
PCB 123	9570	33.3	1	0.00003	0.287
PCB 118	491000	346	50	0.00003	14.7
PCB 114	8240	33.3	1	0.00003	0.247
PCB 105	259000	447	50	0.00003	7.77
PCB 126	2240	38.8	1	0.1	224
PCB 167	44000	74.9	50	0.00003	1.32
PCBs 156 + 157	147000	122	50	0.00003	4.41
PCB 169	181	51.1	1	0.03	5.43
PCB 189	2960	25.3	1	0.00003	0.0888
Total TEQ					260

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: E1000009-004
Run Type: Dilution
Service Request: E1000009
Date Collected: 11/5/09 0958
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.196g
Data File Name: U222007
ICAL Date: 10/19/09
Date Analyzed: 1/25/10 2132
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U222003

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	ND U	60.7	6210			50
PCB 77	13900 B	73.7	6210	0.81	1.000	50
PCB 123	ND U	475	6210			50
PCB 118	491000 B	346	6210	1.55	1.000	50
PCB 114	ND U	490	6210			50
PCB 105	259000 B	447	2480	1.57	1.000	50
PCB 126	ND U	501	6210			50
PCB 167	44000 B	74.9	6210	1.27	1.000	50
PCBs 156 + 157	147000 B	122	6210	1.27	1.000	50
PCB 169	ND U	96.6	6210			50
PCB 189	ND U	153	6210			50

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: E1000009-004
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/5/09 0958
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 77.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.196g

Data File Name: U222007
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 2132
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U222003

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2724.239	136		25-150	0.77	1.328
PCB 77L	2130	2602.238	122		25-150	0.78	1.349
PCB 123L	2470	2442.625	99		25-150	1.56	1.136
PCB 118L	2020	2585.694	128		25-150	1.59	1.145
PCB 114L	2500	2377.326	95		25-150	1.54	1.161
PCB 105L	2250	2448.721	109		25-150	1.54	1.180
PCB 126L	2440	2668.282	109		25-150	1.52	1.269
PCB 167L	2990	2066.087	69		25-150	1.31	1.070
PCBs 156L + 157L	6670	4437.844	67		25-150	1.29	1.098
PCB 169L	3152	2153.033	68		25-150	1.21	1.174
PCB 189L	2530	2103.575	83		25-150	1.00	0.962
PCB 111L	40	38.706	97		30-135	1.61	1.078
PCB 178L	40	48.959	122		30-135	1.14	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: E1000009-005

Service Request: E1000009
Date Collected: 11/5/09 1210
Date Received: 11/10/09

Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.376g

Data File Name: U221940
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1015
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	245	8.87	117	0.79	1.000	1
PCB 77	5100 B	9.51	117	0.81	1.000	1
PCB 123	1100	10.1	117	1.55	1.000	1
PCB 118	43500 BE	8.93	117	1.57	1.001	1
PCB 114	1400	10.1	117	1.57	1.000	1
PCB 105	28700 BE	9.97	46.7	1.59	1.000	1
PCB 126	403	10.1	117	1.56	1.001	1
PCB 167	4620 B	13.6	117	1.27	1.000	1
PCBs 156 + 157	16700 BE	19.0	117	1.27	1.000	1
PCB 169	169	15.5	117	1.25	0.999	1
PCB 189	2620	32.7	117	1.03	1.001	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: E1000009-005

Service Request: E1000009
Date Collected: 11/5/09 1210
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.376g
Data File Name: U221940
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1015
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2167.121	108		25-150	0.78	1.327
PCB 77L	2000	2137.035	107		25-150	0.80	1.348
PCB 123L	2000	1888.173	94		25-150	1.60	1.135
PCB 118L	2000	2055.433	103		25-150	1.58	1.144
PCB 114L	2000	1838.129	92		25-150	1.58	1.160
PCB 105L	2000	1995.922	100		25-150	1.59	1.179
PCB 126L	2000	2240.066	112		25-150	1.56	1.268
PCB 167L	2000	1623.648	81		25-150	1.27	1.070
PCBs 156L + 157L	4000	3583.868	90		25-150	1.27	1.097
PCB 169L	2000	1782.547	89		25-150	1.25	1.173
PCB 189L	2000	1602.064	80		25-150	1.05	0.962
PCB 111L	2000	1582.783	79		30-135	1.56	1.078
PCB 178L	2000	1099.716	55		30-135	1.05	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: E1000009-005

Service Request: E1000009
Date Collected: 11/5/09 1210
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	245	8.87	1	0.0003	0.0735
PCB 77	5100	9.51	1	0.0001	0.510
PCB 123	1100	10.1	1	0.00003	0.0330
PCB 118	43500	8.93	1	0.00003	1.31
PCB 114	1400	10.1	1	0.00003	0.0420
PCB 105	28700	9.97	1	0.00003	0.861
PCB 126	403	10.1	1	0.1	40.3
PCB 167	4620	13.6	1	0.00003	0.139
PCBs 156 + 157	16700	19.0	1	0.00003	0.501
PCB 169	169	15.5	1	0.03	5.07
PCB 189	2620	32.7	1	0.00003	0.0786
Total TEQ					48.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: E1000009-006

Service Request: E1000009
Date Collected: 11/5/09 1440
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 80.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.088g
Data File Name: U221941
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1123
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	50.1 JK	1.80	123	0.97	1.000	1
PCB 77	821 B	2.24	123	0.80	1.001	1
PCB 123	408	46.7	123	1.60	1.000	1
PCB 118	11400 BE	41.2	123	1.59	1.001	1
PCB 114	362	45.7	123	1.60	1.000	1
PCB 105	7730 B	47.8	49.0	1.59	1.000	1
PCB 126	87.0 J	46.2	123	1.68	1.000	1
PCB 167	1280 B	13.2	123	1.27	1.001	1
PCBs 156 + 157	3610 B	18.8	123	1.27	1.000	1
PCB 169	47.3 J	14.0	123	1.32	0.999	1
PCB 189	682	8.00	123	1.04	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: E1000009-006

Service Request: E1000009
Date Collected: 11/5/09 1440
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 80.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.088g
Data File Name: U221941
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1123
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	1817.490	91		25-150	0.80	1.325
PCB 77L	2000	1793.043	90		25-150	0.79	1.346
PCB 123L	2000	1649.912	82		25-150	1.58	1.135
PCB 118L	2000	1736.903	87		25-150	1.59	1.144
PCB 114L	2000	1654.695	83		25-150	1.59	1.160
PCB 105L	2000	1676.065	84		25-150	1.59	1.179
PCB 126L	2000	1910.828	96		25-150	1.60	1.268
PCB 167L	2000	1548.831	77		25-150	1.27	1.071
PCBs 156L + 157L	4000	3293.824	82		25-150	1.28	1.098
PCB 169L	2000	1758.849	88		25-150	1.27	1.174
PCB 189L	2000	1452.534	73		25-150	1.04	0.962
PCB 111L	2000	1435.617	72		30-135	1.56	1.079
PCB 178L	2000	1138.323	57		30-135	1.09	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: E1000009-006

Service Request: E1000009
Date Collected: 11/5/09 1440
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	50.1	1.80	1	0.0003	0.0150
PCB 77	821	2.24	1	0.0001	0.0821
PCB 123	408	46.7	1	0.00003	0.0122
PCB 118	11400	41.2	1	0.00003	0.342
PCB 114	362	45.7	1	0.00003	0.0109
PCB 105	7730	47.8	1	0.00003	0.232
PCB 126	87.0	46.2	1	0.1	8.70
PCB 167	1280	13.2	1	0.00003	0.0384
PCBs 156 + 157	3610	18.8	1	0.00003	0.108
PCB 169	47.3	14.0	1	0.03	1.42
PCB 189	682	8.00	1	0.00003	0.0205

Total TEQ

11.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: E1000009-007

Service Request: E1000009
Date Collected: 11/5/09 1510
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.483g
Data File Name: U221942
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1231
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	51.9 J	3.44	126	0.86	1.000	1
PCB 77	648 B	3.73	126	0.79	1.000	1
PCB 123	289	32.3	126	1.54	1.000	1
PCB 118	9780 B	29.4	126	1.59	1.001	1
PCB 114	297	32.5	126	1.56	1.001	1
PCB 105	6710 B	33.0	50.3	1.58	1.000	1
PCB 126	90.9 J	33.4	126	1.63	1.001	1
PCB 167	1180 B	4.40	126	1.28	1.000	1
PCBs 156 + 157	3640 B	6.26	126	1.27	1.000	1
PCB 169	61.1 J	4.84	126	1.18	0.999	1
PCB 189	625	9.16	126	1.03	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: E1000009-007

Service Request: E1000009
Date Collected: 11/5/09 1510
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 72.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.483g
Data File Name: U221942
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1231
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	1361.994	68		25-150	0.79	1.327
PCB 77L	2000	1348.406	67		25-150	0.79	1.348
PCB 123L	2000	1316.711	66		25-150	1.56	1.135
PCB 118L	2000	1368.101	68		25-150	1.59	1.144
PCB 114L	2000	1279.859	64		25-150	1.61	1.160
PCB 105L	2000	1351.389	68		25-150	1.56	1.179
PCB 126L	2000	1500.915	75		25-150	1.55	1.268
PCB 167L	2000	1074.348	54		25-150	1.29	1.070
PCBs 156L + 157L	4000	2285.453	57		25-150	1.28	1.097
PCB 169L	2000	1201.105	60		25-150	1.28	1.173
PCB 189L	2000	1085.188	54		25-150	1.06	0.962
PCB 111L	2000	1092.507	55		30-135	1.57	1.078
PCB 178L	2000	745.493	37		30-135	1.08	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: E1000009-007

Service Request: E1000009
Date Collected: 11/5/09 1510
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	51.9	3.44	1	0.0003	0.0156
PCB 77	648	3.73	1	0.0001	0.0648
PCB 123	289	32.3	1	0.00003	0.00867
PCB 118	9780	29.4	1	0.00003	0.293
PCB 114	297	32.5	1	0.00003	0.00891
PCB 105	6710	33.0	1	0.00003	0.201
PCB 126	90.9	33.4	1	0.1	9.09
PCB 167	1180	4.40	1	0.00003	0.0354
PCBs 156 + 157	3640	6.26	1	0.00003	0.109
PCB 169	61.1	4.84	1	0.03	1.83
PCB 189	625	9.16	1	0.00003	0.0188

Total TEQ

11.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: E1000009-008

Service Request: E1000009
Date Collected: 11/5/09 1540
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.201g
Data File Name: U221943
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1534
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	125	3.91	123	0.85	1.000	1
PCB 77	1680 B	4.19	123	0.80	1.000	1
PCB 123	966	96.2	123	1.62	1.000	1
PCB 118	25200 BE	86.5	123	1.52	1.000	1
PCB 114	1040	97.2	123	1.58	1.000	1
PCB 105	19700 BE	95.7	49.0	1.53	1.000	1
PCB 126	500	101	123	1.38	1.001	1
PCB 167	4820 B	3.93	123	1.25	1.001	1
PCBs 156 + 157	15100 BE	5.86	123	1.25	1.000	1
PCB 169	207	4.37	123	1.23	1.000	1
PCB 189	3170	36.0	123	0.98	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: E1000009-008

Service Request: E1000009
Date Collected: 11/5/09 1540
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 78.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.201g
Data File Name: U221943
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 1534
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221938

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	954.345	48		25-150	0.77	1.327
PCB 77L	2000	935.561	47		25-150	0.78	1.347
PCB 123L	2000	824.081	41		25-150	1.51	1.135
PCB 118L	2000	878.092	44		25-150	1.58	1.144
PCB 114L	2000	825.915	41		25-150	1.53	1.160
PCB 105L	2000	858.444	43		25-150	1.59	1.179
PCB 126L	2000	934.401	47		25-150	1.55	1.268
PCB 167L	2000	689.923	34		25-150	1.25	1.070
PCBs 156L + 157L	4000	1329.060	33		25-150	1.28	1.097
PCB 169L	2000	755.209	38		25-150	1.27	1.173
PCB 189L	2000	742.770	37		25-150	1.06	0.962
PCB 111L	2000	748.413	37		30-135	1.56	1.078
PCB 178L	2000	626.863	31		30-135	1.04	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: E1000009-008

Service Request: E1000009
Date Collected: 11/5/09 1540
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	125	3.91	1	0.0003	0.0375
PCB 77	1680	4.19	1	0.0001	0.168
PCB 123	966	96.2	1	0.00003	0.0290
PCB 118	25200	86.5	1	0.00003	0.756
PCB 114	1040	97.2	1	0.00003	0.0312
PCB 105	19700	95.7	1	0.00003	0.591
PCB 126	500	101	1	0.1	50.0
PCB 167	4820	3.93	1	0.00003	0.145
PCBs 156 + 157	15100	5.86	1	0.00003	0.453
PCB 169	207	4.37	1	0.03	6.21
PCB 189	3170	36.0	1	0.00003	0.0951
Total TEQ					58.5

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: E1000009-009
Service Request: E1000009
Date Collected: 11/5/09 1650
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 82.1

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.546g
Data File Name: U221947
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 2048
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	40.1 J	1.30	110	0.77	1.001	1
PCB 77	515 B	1.41	110	0.80	1.001	1
PCB 123	261	35.2	110	1.56	1.000	1
PCB 118	6440 B	32.1	110	1.55	1.001	1
PCB 114	275	35.8	110	1.52	1.001	1
PCB 105	4830 B	35.5	43.9	1.55	1.000	1
PCB 126	139	35.4	110	1.55	1.000	1
PCB 167	1160 B	19.0	110	1.27	1.000	1
PCBs 156 + 157	3760 B	27.1	110	1.30	1.000	1
PCB 169	52.5 J	21.4	110	1.24	0.999	1
PCB 189	754	5.89	110	1.01	1.001	1

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	E1000009
Project:	Sauget E. St. Louis/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/10/09
Sample Name:	SE-SS-23-110509	Units:	Percent
Lab Code:	E1000009-009	Basis:	Dry
		Percent Solids:	82.1

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method:	1668A	Date Analyzed:	1/15/10 2048
Prep Method:	Method	Date Extracted:	1/8/10
Sample Amount:	5.546g	Instrument Name:	E-HRMS-02
Data File Name:	U221947	GC Column:	SPB-OCTYL
ICAL Date:	10/19/09	Blank File Name:	U221939
		Cal Ver. File Name:	U221944

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2022.903	101		25-150	0.78	1.327
PCB 77L	2000	1993.484	100		25-150	0.80	1.347
PCB 123L	2000	1794.903	90		25-150	1.58	1.135
PCB 118L	2000	1871.938	94		25-150	1.59	1.144
PCB 114L	2000	1770.505	89		25-150	1.53	1.160
PCB 105L	2000	1837.633	92		25-150	1.58	1.179
PCB 126L	2000	2066.522	103		25-150	1.54	1.268
PCB 167L	2000	1470.918	74		25-150	1.29	1.071
PCBs 156L + 157L	4000	3138.126	78		25-150	1.24	1.098
PCB 169L	2000	1588.978	79		25-150	1.28	1.173
PCB 189L	2000	1496.914	75		25-150	1.05	0.962
PCB 111L	2000	1468.480	73		30-135	1.56	1.077
PCB 178L	2000	1104.785	55		30-135	1.08	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: E1000009-009

Service Request: E1000009
Date Collected: 11/5/09 1650
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	40.1	1.30	1	0.0003	0.0120
PCB 77	515	1.41	1	0.0001	0.0515
PCB 123	261	35.2	1	0.00003	0.00783
PCB 118	6440	32.1	1	0.00003	0.193
PCB 114	275	35.8	1	0.00003	0.00825
PCB 105	4830	35.5	1	0.00003	0.145
PCB 126	139	35.4	1	0.1	13.9
PCB 167	1160	19.0	1	0.00003	0.0348
PCBs 156 + 157	3760	27.1	1	0.00003	0.113
PCB 169	52.5	21.4	1	0.03	1.58
PCB 189	754	5.89	1	0.00003	0.0226

Total TEQ

16.1

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: E1000009-010
Service Request: E1000009
Date Collected: 11/5/09 1650
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.869g
Data File Name: U221948
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 2157
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	40.8 J	1.34	111	0.83	1.000	1
PCB 77	593 B	1.49	111	0.80	1.000	1
PCB 123	237	30.5	111	1.57	1.000	1
PCB 118	6310 B	27.3	111	1.59	1.001	1
PCB 114	262	31.3	111	1.58	1.001	1
PCB 105	4640 B	30.1	44.4	1.56	1.000	1
PCB 126	126	30.8	111	1.38	1.000	1
PCB 167	1070 B	16.7	111	1.28	1.000	1
PCBs 156 + 157	3400 B	23.3	111	1.27	1.000	1
PCB 169	39.8 J	19.0	111	1.27	1.000	1
PCB 189	637	5.95	111	1.02	1.001	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	E1000009
Project:	Sauget E. St. Louis/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/10/09
Sample Name:	SE-SS-23-110509-D	Units:	Percent
Lab Code:	E1000009-010	Basis:	Dry
		Percent Solids:	76.7

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method:	1668A	Date Analyzed:	1/15/10 2157
Prep Method:	Method	Date Extracted:	1/8/10
Sample Amount:	5.869g	Instrument Name:	E-HRMS-02
Data File Name:	U221948	GC Column:	SPB-OCTYL
ICAL Date:	10/19/09	Blank File Name:	U221939
		Cal Ver. File Name:	U221944

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2132.010	107		25-150	0.80	1.327
PCB 77L	2000	2066.570	103		25-150	0.79	1.348
PCB 123L	2000	1839.895	92		25-150	1.52	1.135
PCB 118L	2000	1916.401	96		25-150	1.59	1.144
PCB 114L	2000	1825.806	91		25-150	1.55	1.160
PCB 105L	2000	1893.128	95		25-150	1.58	1.180
PCB 126L	2000	2109.326	105		25-150	1.54	1.268
PCB 167L	2000	1554.907	78		25-150	1.25	1.070
PCBs 156L + 157L	4000	3342.494	84		25-150	1.22	1.097
PCB 169L	2000	1722.252	86		25-150	1.24	1.173
PCB 189L	2000	1567.517	78		25-150	1.05	0.962
PCB 111L	2000	1526.472	76		30-135	1.58	1.078
PCB 178L	2000	1185.604	59		30-135	1.04	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: E1000009-010

Service Request: E1000009
Date Collected: 11/5/09 1650
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	40.8	1.34	1	0.0003	0.0122
PCB 77	593	1.49	1	0.0001	0.0593
PCB 123	237	30.5	1	0.00003	0.00711
PCB 118	6310	27.3	1	0.00003	0.189
PCB 114	262	31.3	1	0.00003	0.00786
PCB 105	4640	30.1	1	0.00003	0.139
PCB 126	126	30.8	1	0.1	12.6
PCB 167	1070	16.7	1	0.00003	0.0321
PCBs 156 + 157	3400	23.3	1	0.00003	0.102
PCB 169	39.8	19.0	1	0.03	1.19
PCB 189	637	5.95	1	0.00003	0.0191
Total TEQ					14.4

2005 WHO TEFs, ND = 0

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: E1000009-011
Service Request: E1000009
Date Collected: 11/6/09 0909
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.041g
Data File Name: U221949
ICAL Date: 10/19/09
Date Analyzed: 1/15/10 2305
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	43.8 J	1.07	132	0.75	1.000	1
PCB 77	591 B	1.20	132	0.80	1.000	1
PCB 123	336	36.6	132	1.63	1.000	1
PCB 118	7540 B	32.9	132	1.58	1.001	1
PCB 114	280	36.4	132	1.59	1.001	1
PCB 105	6580 B	36.6	52.8	1.56	1.000	1
PCB 126	149	37.2	132	1.55	1.000	1
PCB 167	1390 B	9.00	132	1.28	1.000	1
PCBs 156 + 157	4380 B	13.0	132	1.28	1.000	1
PCB 169	61.7 J	9.65	132	1.14	0.999	1
PCB 189	796	8.41	132	0.97	1.001	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: E1000009-011

Service Request: E1000009
Date Collected: 11/6/09 0909
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 75.2

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.041g
Data File Name: U221949
ICAL Date: 10/19/09

Date Analyzed: 1/15/10 2305
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2090.139	105		25-150	0.78	1.326
PCB 77L	2000	2064.286	103		25-150	0.78	1.347
PCB 123L	2000	1800.590	90		25-150	1.59	1.135
PCB 118L	2000	1851.536	93		25-150	1.56	1.144
PCB 114L	2000	1782.866	89		25-150	1.57	1.160
PCB 105L	2000	1838.075	92		25-150	1.55	1.180
PCB 126L	2000	2060.269	103		25-150	1.56	1.268
PCB 167L	2000	1508.739	75		25-150	1.26	1.071
PCBs 156L + 157L	4000	3151.370	79		25-150	1.23	1.098
PCB 169L	2000	1678.029	84		25-150	1.29	1.173
PCB 189L	2000	1512.220	76		25-150	1.01	0.962
PCB 111L	2000	1512.642	76		30-135	1.58	1.078
PCB 178L	2000	1168.707	58		30-135	1.03	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: E1000009-011

Service Request: E1000009
Date Collected: 11/6/09 0909
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	43.8	1.07	1	0.0003	0.0131
PCB 77	591	1.20	1	0.0001	0.0591
PCB 123	336	36.6	1	0.00003	0.0101
PCB 118	7540	32.9	1	0.00003	0.226
PCB 114	280	36.4	1	0.00003	0.00840
PCB 105	6580	36.6	1	0.00003	0.197
PCB 126	149	37.2	1	0.1	14.9
PCB 167	1390	9.00	1	0.00003	0.0417
PCBs 156 + 157	4380	13.0	1	0.00003	0.131
PCB 169	61.7	9.65	1	0.03	1.85
PCB 189	796	8.41	1	0.00003	0.0239

Total TEQ

17.5

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: E1000009-012

Service Request: E1000009
Date Collected: 11/6/09 1308
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.115g
Data File Name: U221950
ICAL Date: 10/19/09

Date Analyzed: 1/16/10 0013
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	198	10.3	125	0.80	1.000	1
PCB 77	3490 B	11.5	125	0.80	1.000	1
PCB 123	1890	35.3	125	1.62	1.000	1
PCB 118	73500 BE	32.5	125	1.56	1.000	1
PCB 114	2040	35.0	125	1.57	1.001	1
PCB 105	46100 BE	35.4	49.8	1.56	1.000	1
PCB 126	645	36.0	125	1.56	1.000	1
PCB 167	10500 BE	22.6	125	1.25	1.000	1
PCBs 156 + 157	32500 BE	30.4	125	1.28	1.000	1
PCB 169	369	25.8	125	1.12	0.999	1
PCB 189	6320	59.7	125	1.00	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: E1000009-012

Service Request: E1000009
Date Collected: 11/6/09 1308
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 78.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.115g
Data File Name: U221950
ICAL Date: 10/19/09

Date Analyzed: 1/16/10 0013
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2097.095	105		25-150	0.79	1.327
PCB 77L	2000	1973.026	99		25-150	0.79	1.348
PCB 123L	2000	1807.563	90		25-150	1.56	1.135
PCB 118L	2000	1958.264	98		25-150	1.52	1.145
PCB 114L	2000	1784.376	89		25-150	1.56	1.160
PCB 105L	2000	1906.443	95		25-150	1.56	1.180
PCB 126L	2000	2043.641	102		25-150	1.58	1.268
PCB 167L	2000	1440.811	72		25-150	1.23	1.070
PCBs 156L + 157L	4000	3060.747	77		25-150	1.26	1.097
PCB 169L	2000	1536.911	77		25-150	1.28	1.173
PCB 189L	2000	1475.647	74		25-150	1.03	0.962
PCB 111L	2000	1541.735	77		30-135	1.58	1.078
PCB 178L	2000	1198.080	60		30-135	1.05	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: E1000009-012

Service Request: E1000009
Date Collected: 11/6/09 1308
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	198	10.3	1	0.0003	0.0594
PCB 77	3490	11.5	1	0.0001	0.349
PCB 123	1890	35.3	1	0.00003	0.0567
PCB 118	62300	160	20	0.00003	1.87
PCB 114	2040	35.0	1	0.00003	0.0612
PCB 105	40200	188	20	0.00003	1.21
PCB 126	645	36.0	1	0.1	64.5
PCB 167	11200	60.7	20	0.00003	0.336
PCBs 156 + 157	33700	80.1	20	0.00003	1.01
PCB 169	369	25.8	1	0.03	11.1
PCB 189	6320	59.7	1	0.00003	0.190
Total TEQ					80.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: E1000009-012
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/6/09 1308
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.115g
Data File Name: U222008
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 2240
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U222003

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	ND U	34.7	2490			20
PCB 77	ND U	39.2	2490			20
PCB 123	ND U	194	2490			20
PCB 118	62300 B	160	2490	1.62	1.000	20
PCB 114	ND U	199	2490			20
PCB 105	40200 B	188	996	1.61	1.000	20
PCB 126	ND U	187	2490			20
PCB 167	11200 B	60.7	2490	1.28	1.000	20
PCBs 156 + 157	33700 B	80.1	2490	1.27	1.000	20
PCB 169	ND U	68.6	2490			20
PCB 189	ND U	90.6	2490			20

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: E1000009-012
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/6/09 1308
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 78.5

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method:	1668A	Date Analyzed:	1/25/10 2240
Prep Method:	Method	Date Extracted:	1/8/10
Sample Amount:	5.115g	Instrument Name:	E-HRMS-02
Data File Name:	U222008	GC Column:	SPB-OCTYL
ICAL Date:	10/19/09	Blank File Name:	U221939
		Cal Ver. File Name:	U222003

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	2595.823	130		25-150	0.78	1.328
PCB 77L	2020	2491.416	123		25-150	0.79	1.349
PCB 123L	2220	2471.956	111		25-150	1.57	1.136
PCB 118L	2040	2597.323	127		25-150	1.54	1.145
PCB 114L	2250	2416.604	108		25-150	1.60	1.161
PCB 105L	2110	2487.297	118		25-150	1.52	1.180
PCB 126L	2000	2665.822	133		25-150	1.60	1.269
PCB 167L	2780	2044.760	74		25-150	1.27	1.070
PCBs 156L + 157L	5190	4412.042	85		25-150	1.31	1.098
PCB 169L	2600	2121.583	82		25-150	1.25	1.174
PCB 189L	2700	2075.491	77		25-150	1.03	0.962
PCB 111L	100	79.793	80		30-135	1.49	1.078
PCB 178L	100	80.377	80		30-135	0.97	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: E1000009-013
Service Request: E1000009
Date Collected: 11/6/09 1335
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.421g
Data File Name: U221951
ICAL Date: 10/19/09
Date Analyzed: 1/16/10 0122
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	358	8.91	127	0.82	1.000	1
PCB 77	5660 B	9.93	127	0.79	1.001	1
PCB 123	1540	9.43	127	1.61	1.000	1
PCB 118	58900 BE	8.46	127	1.57	1.001	1
PCB 114	1770	9.22	127	1.57	1.000	1
PCB 105	40300 BE	9.44	51.0	1.58	1.000	1
PCB 126	570	9.89	127	1.38	1.001	1
PCB 167	7360 B	18.5	127	1.28	1.000	1
PCBs 156 + 157	22700 BE	26.6	127	1.27	1.000	1
PCB 169	213	20.7	127	1.07	0.999	1
PCB 189	4700	45.1	127	0.99	1.000	1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: E1000009-013

Service Request: E1000009
Date Collected: 11/6/09 1335
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 72.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.421g
Data File Name: U221951
ICAL Date: 10/19/09

Date Analyzed: 1/16/10 0122
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U221944

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2000	1626.085	81		25-150	0.78	1.328
PCB 77L	2000	1546.717	77		25-150	0.78	1.348
PCB 123L	2000	1391.824	70		25-150	1.58	1.135
PCB 118L	2000	1495.560	75		25-150	1.56	1.144
PCB 114L	2000	1394.500	70		25-150	1.58	1.160
PCB 105L	2000	1468.014	73		25-150	1.60	1.179
PCB 126L	2000	1573.277	79		25-150	1.57	1.268
PCB 167L	2000	1142.501	57		25-150	1.25	1.070
PCBs 156L + 157L	4000	2425.428	61		25-150	1.26	1.098
PCB 169L	2000	1241.269	62		25-150	1.24	1.173
PCB 189L	2000	1168.141	58		25-150	1.03	0.962
PCB 111L	2000	1133.054	57		30-135	1.57	1.078
PCB 178L	2000	891.653	45		30-135	1.03	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: E1000009-013

Service Request: E1000009
Date Collected: 11/6/09 1335
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
PCB 81	358	8.91	1	0.0003	0.107
PCB 77	5660	9.93	1	0.0001	0.566
PCB 123	1540	9.43	1	0.00003	0.0462
PCB 118	45800	93.3	10	0.00003	1.37
PCB 114	1770	9.22	1	0.00003	0.0531
PCB 105	31100	108	10	0.00003	0.933
PCB 126	570	9.89	1	0.1	57.0
PCB 167	7360	18.5	1	0.00003	0.221
PCBs 156 + 157	20700	58.5	10	0.00003	0.621
PCB 169	213	20.7	1	0.03	6.39
PCB 189	4700	45.1	1	0.00003	0.141
Total TEQ					67.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: E1000009-013
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/6/09 1335
Date Received: 11/10/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.421g
Data File Name: U222009
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 2348
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U222003

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
PCB 81	ND U	18.7	1270			10
PCB 77	ND U	21.9	1270			10
PCB 123	ND U	111	1270			10
PCB 118	45800 B	93.3	1270	1.58	1.000	10
PCB 114	ND U	108	1270			10
PCB 105	31100 B	108	510	1.56	1.000	10
PCB 126	ND U	106	1270			10
PCB 167	ND U	45.4	1270			10
PCBs 156 + 157	20700 B	58.5	1270	1.25	1.000	10
PCB 169	ND U	49.6	1270			10
PCB 189	ND U	85.1	1270			10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugeet E. St. Louis/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: E1000009-013
Run Type: Dilution

Service Request: E1000009
Date Collected: 11/6/09 1335
Date Received: 11/10/09
Units: Percent
Basis: Dry
Percent Solids: 72.4

Chlorinated Biphenyl Congeners by HRGC/HRMS

Analytical Method: 1668A
Prep Method: Method
Sample Amount: 5.421g

Data File Name: U222009
ICAL Date: 10/19/09

Date Analyzed: 1/25/10 2348
Date Extracted: 1/8/10
Instrument Name: E-HRMS-02
GC Column: SPB-OCTYL
Blank File Name: U221939
Cal Ver. File Name: U222003

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
PCB 81L	2470	2307.320	93		25-150	0.77	1.328
PCB 77L	2600	2211.313	85		25-150	0.79	1.348
PCB 123L	2860	2292.052	80		25-150	1.56	1.135
PCB 118L	2670	2407.536	90		25-150	1.60	1.145
PCB 114L	2860	2261.323	79		25-150	1.61	1.160
PCB 105L	2740	2293.403	84		25-150	1.56	1.180
PCB 126L	2530	2454.984	97		25-150	1.58	1.269
PCB 167L	3510	1925.718	55		25-150	1.24	1.071
PCBs 156L + 157L	6560	4030.244	61		25-150	1.25	1.098
PCB 169L	3230	1929.254	60		25-150	1.22	1.174
PCB 189L	3450	2010.154	58		25-150	1.01	0.962
PCB 111L	200	101.417	51		30-135	1.56	1.078
PCB 178L	200	98.997	49		30-135	1.01	1.011

Comments: _____

**DATA VALIDATION REPORT
FOR PCB HOMOLOG DATA**

**SAUGET/E. ST. LOUIS RESIDENTIAL PCB/DIOXIN SAMPLING
SAUGET AND E. ST. LOUIS, ILLINOIS**

Date: January 12, 2010

Laboratory: Columbia Analytical Services (CAS), Rochester, New York

Laboratory Work Order #: R0906411

Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START)

Weston Analytical Work Order #/TDD #: 20405.016.008.0828.00/ S05-0008-0910-033

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 36 soil samples collected for the Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site (Sauget) that were analyzed for PCB homologs using U.S. Environmental Protection Agency (U.S. EPA) Method 680.

A quality assurance (QA) level IV data package was received from CAS. The data validation was conducted in general accordance with the U.S. EPA Contract Laboratory Program "National Functional Guidelines for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

PCB HOMOLOGS BY U.S. EPA METHOD 680

1. Samples

The following table summarizes the soil samples for which this data validation was conducted.

Samples	Lab ID	Date Collected	Date Extracted	Date Analyzed
SE-SS-01-110409	R0906411-001	11/04/2009	11/9/2009	11/18/2009
SE-SS-02-110409	R0906411-002	11/04/2009	11/9/2009	11/18/2009
SE-SS-03-110409	R0906411-003	11/04/2009	11/9/2009	11/18/2009
SE-SS-04-110409	R0906411-004	11/04/2009	11/9/2009	11/18/2009
SE-SS-05-110409	R0906411-005	11/04/2009	11/9/2009	11/23/2009 – 11/24/2009
SE-SS-05-110409-D	R0906411-006	11/04/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-06-110409	R0906411-007	11/04/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-07-110409	R0906411-008	11/04/2009	11/11/2009	12/2/2009
SE-SS-08-110409	R0906411-009	11/04/2009	11/11/2009	12/2/2009
SE-SS-09-110409	R0906411-010	11/04/2009	11/11/2009	12/2/2009
SE-SS-10-110409	R0906411-011	11/04/2009	11/11/2009	12/2/2009
SE-SS-11-110409	R0906411-012	11/04/2009	11/11/2009	12/2/2009
SE-SS-12-110409	R0906411-013	11/04/2009	11/11/2009	12/2/2009
SE-SS-13-110509	R0906411-014	11/05/2009	11/9/2009	11/20/2009 – 11/23/2009

Data Validation Report for PCB Homolog Data
 Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
 Columbia Analytical Services
 Laboratory Work Order #: R0906411

Samples	Lab ID	Date Collected	Date Extracted	Date Analyzed
SE-SS-14-110509	R0906411-015	11/05/2009	11/9/2009	11/23/2009 – 11/24/2009
SE-SS-15-110509	R0906411-016	11/05/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-16-110509	R0906411-017	11/05/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-17-110509	R0906411-018	11/05/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-18-110509	R0906411-019	11/05/2009	11/9/2009	11/20/2009 – 11/23/2009
SE-SS-19-110509	R0906411-020	11/05/2009	12/2/2009	12/4/2009
SE-SS-20-110509	R0906411-021	11/05/2009	12/2/2009	12/4/2009
SE-SS-21-110509	R0906411-022	11/05/2009	12/2/2009	12/4/2009
SE-SS-22-110509	R0906411-023	11/05/2009	12/2/2009	12/4/2009
SE-SS-23-110509	R0906411-024	11/05/2009	12/2/2009	12/4/2009
SE-SS-23-110509-D	R0906411-025	11/05/2009	12/2/2009	12/4/2009
SE-SS-24-110609	R0906411-026	11/06/2009	12/2/2009	12/4/2009
SE-SS-25-110609	R0906411-027	11/06/2009	12/2/2009	12/4/2009
SE-SS-26-110609	R0906411-028	11/06/2009	12/2/2009	12/7/2009
SE-SS-27-110609	R0906411-029	11/06/2009	12/2/2009	12/7/2009
SE-SS-28-110609	R0906411-030	11/06/2009	12/2/2009	12/7/2009
SE-SS-29-110609	R0906411-031	11/06/2009	12/2/2009	12/7/2009
SE-SS-30-110609	R0906411-032	11/06/2009	12/2/2009	12/7/2009
SE-SS-31-110609	R0906411-033	11/06/2009	11/11/2009	12/2/2009
SE-SS-32-110609	R0906411-034	11/06/2009	11/11/2009	12/3/2009
SE-SS-33-110609	R0906411-035	11/06/2009	11/11/2009	12/3/2009
SE-SS-34-110609	R0906411-036	11/06/2009	11/11/2009	12/3/2009

2. Holding Times

Method 680 states that the holding time limit for PCB homologs in water samples is 7 days to extraction and 40 days from extraction to analysis but does not state a holding time limit for PCB homologs in soil samples. Therefore, the PCB Aroclor holding time limit for soil samples was utilized. The holding time limit for PCB Aroclors in soil samples is 14 days to extraction and 40 days from extraction to analysis. This was met for all samples except for samples with laboratory IDs R0906411-020 through -32. These samples were extracted on 12/2/2009 or approximately 13 to 14 days past the holding time. Per the data validation guidance, detected results in these samples were flagged “J” and the quantitation limits for no detected results were flagged “UJ”. These results should be considered estimated.

Data Validation Report for PCB Homolog Data
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: R0906411

3. Initial Calibration Results

The initial calibration gave acceptable results. The relative standard deviation (RSD) was less than 20 percent as required between calibration factors (CF).

4. Continuing Calibration Results

The CF for each analyte calculated from the continuing calibration verification standard did not exceed a percent difference of more than \pm 15 percent when compared to the mean CF from the initial calibration curve.

5. Blanks

Method blanks were analyzed with the samples as required and were free of target compound contamination above the reporting limit.

6. Surrogates

The surrogates were not recovered in the samples. According to the laboratory, the surrogates were all diluted out during the extraction process. Because the surrogates were recovered in the QC samples with acceptable recoveries, no qualifications were applied.

7. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

CAS used samples SE-SS-01-110409, SE-SS-28-110409, and SE-SS-31-110409 for the spiked samples for MS/MSD analysis. The amount of target analyte spiked in most of the samples was below the reporting limits. Therefore, if a target analyte was not detected in the sample then the spiked amount was also not detected as it was below the reporting limit. In addition, if the spiked amount is less than four times the sample concentration, then adequate recovery of the spike may be difficult especially if the sample was diluted after the spike was added. Most spike recoveries were outside QC limits; however, adequate recovery of the spikes is not expected for the reasons listed. No qualifications were applied.

8. Laboratory Control Sample (LCS) Results

The LCS and LCS duplicate recoveries were within the laboratory-established QC limits for percent recovery and relative percent difference (RPD).

Data Validation Report for **PCB Homolog Data**
Sauget/E. St. Louis Residential PCB/Dioxins Sampling Site
Columbia Analytical Services
Laboratory Work Order #: R0906411

9. Field Duplicate Results

Sample SE-SS05-110409-D is a field duplicate of sample SE-SS05-110409 and sample SE-SS23-110509-D is a field duplicate of sample SE-SS23-110509. The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. Note that there is no established QC limit for RPD for field duplicates; however, 50 RPD is generally used for evaluation.

For sample SE-SS05-110409 and its duplicate, there were no detections of target analytes in the samples indicating good correlation between the investigative sample and its duplicate.

For sample SE-SS23-110409 and its duplicate, three target analytes were detected in the investigative sample and four target analytes were detected in the field duplicate. The RPDs ranged from 12 to 21 percent indicating good correlation. The field duplicate did contain one compound detection that the parent sample did not; however, the detected result was close to the reporting limit.

10. Overall Assessment of Data

The data are acceptable use as qualified based on the information received.

ATTACHMENT

CAS

RESULTS SUMMARY WITH QUALIFIERS



REPORT QUALIFIERS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits.
- # Spike was diluted out.
- + Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Pesticide/Aroclors: Concentration >40% (25% for CLP) difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.



CAS/Rochester Lab ID # for State Certifications¹

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Nebraska Accredited
Navy Facilities Engineering Service Center Approved

Nevada ID # NY-00032
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania ID# 68-786
Rhode Island ID # 158
West Virginia ID # 292

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-01-110409
Lab Code: R0906411-001

Service Request: R0906411
Date Collected: 11/4/09 0940
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Dichlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Trichlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Tetrachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Pentachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Hexachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Heptachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Octachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Nonachlorobiphenyls, Total	130	U	130	5	11/9/09	11/18/09 13:36	100258	180093	
Decachlorobiphenyls, Total	180		130	5	11/9/09	11/18/09 13:36	100258	180093	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/18/09 13:36	D
4,4'-DDT	0	*	30-150	11/18/09 13:36	D

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-02-110409
Lab Code: R0906411-002

Service Request: R0906411
Date Collected: 11/4/09 1022
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Dichlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Trichlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Tetrachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Pentachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Hexachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Heptachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Octachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Nonachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 15:56	100258	180093	
Decachlorobiphenyls, Total	320	130	5	11/9/09	11/18/09 15:56	100258	180093	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/18/09 15:56	D	
4,4'-DDT	0 *	30-150	11/18/09 15:56	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003

Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 77.8

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Dichlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Trichlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Tetrachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Pentachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Hexachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Heptachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Octachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Nonachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	
Decachlorobiphenyls, Total	130 U	130	5	11/9/09	11/18/09 17:06	100258	180093	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/18/09 17:06	D	
4,4'-DDT	0 *	30-150	11/18/09 17:06	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004

Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 77.4

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution	Date	Date	Extraction Analysis		
			Factor	Extracted	Analyzed	Lot	Lot	Note
Monochlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Dichlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Trichlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Tetrachlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Pentachlorobiphenyls, Total	1700	520	20	11/9/09	11/18/09 17:41	100258	180093	
Hexachlorobiphenyls, Total	1400	520	20	11/9/09	11/18/09 17:41	100258	180093	
Heptachlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Octachlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Nonachlorobiphenyls, Total	520 U	520	20	11/9/09	11/18/09 17:41	100258	180093	
Decachlorobiphenyls, Total	1300	520	20	11/9/09	11/18/09 17:41	100258	180093	

Surrogate Name	%Rec	Control	Date	Q	Note
		Limits	Analyzed		
gamma-BHC (Lindane)	0 *	30-150	11/18/09 17:41 D		
4,4'-DDT	0 *	30-150	11/18/09 17:41 D		

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409
Lab Code: R0906411-005

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Dichlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Trichlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Tetrachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Pentachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Hexachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Heptachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Octachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Nonachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	
Decachlorobiphenyls, Total	250 U	250	10	11/9/09	11/23/09 20:05	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/23/09 20:05	D	
4,4'-DDT	0 *	30-150	11/23/09 20:05	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-05-110409
Lab Code: R0906411-005
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09

Units: µg/Kg
Basis: Dry
Percent Solids: 79.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Dichlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Trichlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Tetrachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Pentachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Hexachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Heptachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Octachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Nonachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	
Decachlorobiphenyls, Total	250	U	250	10	11/9/09	11/24/09 15:32	100258	181276	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/24/09 15:32	D
4,4'-DDT	0	*	30-150	11/24/09 15:32	D

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 80.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Dichlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Trichlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Tetrachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Pentachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Hexachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Heptachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Octachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Nonachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	
Decachlorobiphenyls, Total	150 U	150	6	11/9/09	11/20/09 12:43	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 12:43	D	
4,4'-DDT	0 *	30-150	11/20/09 12:43	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 80.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Dichlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Trichlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Tetrachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Pentachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Hexachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Heptachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Octachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Nonachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	
Decachlorobiphenyls, Total	150 U	150	6	11/9/09	11/23/09 15:26	100258	180967	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/23/09 15:26	D	
4,4'-DDT	0 *	30-150	11/23/09 15:26	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-06-110409
Lab Code: R0906411-007

Service Request: R0906411
Date Collected: 11/4/09 13:50
Date Received: 11/7/09

Units: µg/Kg
Basis: Dry
Percent Solids: 72.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Dichlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Trichlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Tetrachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Pentachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Hexachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Heptachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Octachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Nonachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 17:57	100258	180730	
Decachlorobiphenyls, Total	690	280	10	11/9/09	11/20/09 17:57	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 17:57	D	
4,4'-DDT	0 *	30-150	11/20/09 17:57	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-06-110409
Lab Code: R0906411-007
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/4/09 1350
Date Received: 11/7/09

Units: µg/Kg
Basis: Dry
Percent Solids: 72.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Dichlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Trichlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Tetrachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Pentachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Hexachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Heptachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Octachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Nonachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 14:51	100258	180967	
Decachlorobiphenyls, Total	590		280	10	11/9/09	11/23/09 14:51	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/23/09 14:51	D
4,4'-DDT	0	*	30-150	11/23/09 14:51	D

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-07-110409
Lab Code: R0906411-008

Service Request: R0906411
Date Collected: 11/4/09 1408
Date Received: 11/7/09

Units: µg/Kg
Basis: Dry
Percent Solids: 78.4

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution	Date	Date	Extraction	Analysis
			Factor	Extracted	Analyzed	Lot	Lot
Monochlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Dichlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Trichlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Tetrachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Pentachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Hexachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Heptachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Octachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Nonachlorobiphenyls, Total	180 U	180	7	11/11/09	12/2/09 14:22	100368	181720
Decachlorobiphenyls, Total	910	180	7	11/11/09	12/2/09 14:22	100368	181720

Surrogate Name	% Rec	Control	Date		
		Limits	Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/2/09 14:22	D	
4,4'-DDT	0 *	30-150	12/2/09 14:22	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-08-110409
Lab Code: R0906411-009

Service Request: R0906411
Date Collected: 11/4/09 1429
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 82.1

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Dichlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Trichlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Tetrachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Pentachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Hexachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Heptachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Octachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Nonachlorobiphenyls, Total	73	U	73	3	11/11/09	12/2/09 14:57	100368	181720	
Decachlorobiphenyls, Total	220		73	3	11/11/09	12/2/09 14:57	100368	181720	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	12/2/09 14:57	D
4,4'-DDT	0	*	30-150	12/2/09 14:57	D

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-09-110409	Units:	µg/Kg
Lab Code:	R0906411-010	Basis:	Dry
		Percent Solids:	76.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Dichlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Trichlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Tetrachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Pentachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Hexachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Heptachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Octachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Nonachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	
Decachlorobiphenyls, Total	78	U	78	3	11/11/09	12/2/09 16:06	100368	181720	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/2/09 16:06	D	
4,4'-DDT	0	* 30-150	12/2/09 16:06	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-10-110409
Lab Code: R0906411-011

Service Request: R0906411
Date Collected: 11/4/09 1620
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 75.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution	Date	Date	Extraction Analysis		
			Factor	Extracted	Analyzed	Lot	Lot	Note
Monochlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Dichlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Trichlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Tetrachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Pentachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Hexachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Heptachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Octachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Nonachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	
Decachlorobiphenyls, Total	270 U	270	10	11/11/09	12/2/09 16:41	100368	181720	

Surrogate Name	%Rec	Control	Date	Q	Note
		Limits	Analyzed		
gamma-BHC (Lindane)	0 *	30-150	12/2/09 16:41	D	
4,4'-DDT	0 *	30-150	12/2/09 16:41	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 78.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Dichlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Trichlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Tetrachlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Pentachlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Hexachlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Heptachlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Octachlorobiphenyls, Total	25 U	25	1	11/11/09	12/2/09 19:01	100368	181720	
Nonachlorobiphenyls, Total	33	25	1	11/11/09	12/2/09 19:01	100368	181720	
Decachlorobiphenyls, Total	110	25	1	11/11/09	12/2/09 19:01	100368	181720	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/2/09 19:01	D	
4,4'-DDT	0 *	30-150	12/2/09 19:01	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: R0906411-013

Service Request: R0906411
Date Collected: 11/5/09 1715
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 72.4

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Dichlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Trichlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Tetrachlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Pentachlorobiphenyls, Total	56		55	2	11/11/09	12/2/09 17:51	100368	181720	
Hexachlorobiphenyls, Total	93		55	2	11/11/09	12/2/09 17:51	100368	181720	
Heptachlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Octachlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Nonachlorobiphenyls, Total	55	U	55	2	11/11/09	12/2/09 17:51	100368	181720	
Decachlorobiphenyls, Total	61		55	2	11/11/09	12/2/09 17:51	100368	181720	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/2/09 17:51	D	
4,4'-DDT	0	* 30-150	12/2/09 17:51	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014

Service Request: R0906411
Date Collected: 11/ 5/09 0841
Date Received: 11/ 7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 69.8

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Dichlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Trichlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Tetrachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Pentachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Hexachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Heptachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Octachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Nonachlorobiphenyls, Total	140 U	140	5	11/ 9/09	11/20/09 10:58	100258	180730	
Decachlorobiphenyls, Total	450	140	5	11/ 9/09	11/20/09 10:58	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 10:58	D	
4,4'-DDT	0 *	30-150	11/20/09 10:58	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0841
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-13-110509	Units:	µg/Kg
Lab Code:	R0906411-014	Basis:	Dry
Run Type:	Dilution	Percent Solids:	69.8

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
						Lot	Lot	Note
Monochlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Dichlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Trichlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Tetrachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Pentachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Hexachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Heptachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Octachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Nonachlorobiphenyls, Total	140 U	140	5	11/9/09	11/23/09 13:06	100258	180967	
Decachlorobiphenyls, Total	390	140	5	11/9/09	11/23/09 13:06	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed Q Note		
gamma-BHC (Lindane)	0 *	30-150	11/23/09 13:06	D	
4,4'-DDT	0 *	30-150	11/23/09 13:06	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0917
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-14-110509	Units:	µg/Kg
Lab Code:	R0906411-015	Basis:	Dry
		Percent Solids:	77.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Dichlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Trichlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Tetrachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Pentachlorobiphenyls, Total	140	78	3	11/9/09	11/23/09 13:41	100258	180967	
Hexachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Heptachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Octachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Nonachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	
Decachlorobiphenyls, Total	78 U	78	3	11/9/09	11/23/09 13:41	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/23/09 13:41	D	
4,4'-DDT	0 *	30-150	11/23/09 13:41	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/ 5/09 0917
Sample Matrix:	Soil	Date Received:	11/ 7/09
Sample Name:	SE-SS-14-110509	Units:	µg/Kg
Lab Code:	R0906411-015	Basis:	Dry
Run Type:	Dilution	Percent Solids:	77.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Dichlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Trichlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Tetrachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Pentachlorobiphenyls, Total	150		78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Hexachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Heptachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Octachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Nonachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	
Decachlorobiphenyls, Total	78	U	78	3	11/ 9/09	11/24/09 16:07	100258	181276	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/24/09 16:07	D
4,4'-DDT	0	*	30-150	11/24/09 16:07	D

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-110509
Lab Code: R0906411-016

Service Request: R0906411
Date Collected: 11/5/09 0958
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 68.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Dichlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Trichlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Tetrachlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Pentachlorobiphenyls, Total	800		290	10	11/9/09	11/20/09 14:28	100258	180730	
Hexachlorobiphenyls, Total	470		290	10	11/9/09	11/20/09 14:28	100258	180730	
Heptachlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Octachlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Nonachlorobiphenyls, Total	290	U	290	10	11/9/09	11/20/09 14:28	100258	180730	
Decachlorobiphenyls, Total	330		290	10	11/9/09	11/20/09 14:28	100258	180730	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/20/09 14:28	D
4,4'-DDT	0	*	30-150	11/20/09 14:28	D

Comments:



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-15-110509	Units:	µg/Kg
Lab Code:	R0906411-016	Basis:	Dry
Run Type:	Dilution	Percent Solids:	68.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Dichlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Trichlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Tetrachlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Pentachlorobiphenyls, Total	880		290	10	11/9/09	11/23/09 16:36	100258	180967	
Hexachlorobiphenyls, Total	380		290	10	11/9/09	11/23/09 16:36	100258	180967	
Heptachlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Octachlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Nonachlorobiphenyls, Total	290	U	290	10	11/9/09	11/23/09 16:36	100258	180967	
Decachlorobiphenyls, Total	300		290	10	11/9/09	11/23/09 16:36	100258	180967	

Surrogate Name	%Rec	Control Limits	Date		
			Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/23/09 16:36	D
4,4'-DDT	0	*	30-150	11/23/09 16:36	D

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-16-110509
Lab Code: R0906411-017

Service Request: R0906411
Date Collected: 11/5/09 1047
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 72.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Dichlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Trichlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Tetrachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Pentachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Hexachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Heptachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Octachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Nonachlorobiphenyls, Total	280 U	280	10	11/9/09	11/20/09 15:03	100258	180730	
Decachlorobiphenyls, Total	570	280	10	11/9/09	11/20/09 15:03	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 15:03	D	
4,4'-DDT	0 *	30-150	11/20/09 15:03	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1047
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-16-110509	Units:	µg/Kg
Lab Code:	R0906411-017	Basis:	Dry
Run Type:	Dilution	Percent Solids:	72.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Dichlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Trichlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Tetrachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Pentachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Hexachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Heptachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Octachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Nonachlorobiphenyls, Total	280	U	280	10	11/9/09	11/23/09 18:55	100258	180967	
Decachlorobiphenyls, Total	480		280	10	11/9/09	11/23/09 18:55	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	11/23/09 18:55	D
4,4'-DDT	0	*	30-150	11/23/09 18:55	D

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018

Service Request: R0906411
Date Collected: 11/5/09 12:10
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:12	100258	180730	
Dichlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:12	100258	180730	
Trichlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:12	100258	180730	
Tetrachlorobiphenyls, Total	44	27	1	11/9/09	11/20/09 16:12	100258	180730	
Pentachlorobiphenyls, Total	99	27	1	11/9/09	11/20/09 16:12	100258	180730	
Hexachlorobiphenyls, Total	110	27	1	11/9/09	11/20/09 16:12	100258	180730	
Heptachlorobiphenyls, Total	120	27	1	11/9/09	11/20/09 16:12	100258	180730	
Octachlorobiphenyls, Total	78	27	1	11/9/09	11/20/09 16:12	100258	180730	
Nonachlorobiphenyls, Total	140	27	1	11/9/09	11/20/09 16:12	100258	180730	
Decachlorobiphenyls, Total	510	27	1	11/9/09	11/20/09 16:12	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 16:12	D	
4,4'-DDT	0 *	30-150	11/20/09 16:12	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/ 5/09 1210
Sample Matrix:	Soil	Date Received:	11/ 7/09
Sample Name:	SE-SS-17-110509	Units:	µg/Kg
Lab Code:	R0906411-018	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	74.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Dichlorobiphenyls, Total	27 U	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Trichlorobiphenyls, Total	27 U	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Tetrachlorobiphenyls, Total	44	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Pentachlorobiphenyls, Total	110	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Hexachlorobiphenyls, Total	130	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Heptachlorobiphenyls, Total	120	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Octachlorobiphenyls, Total	66	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Nonachlorobiphenyls, Total	130	27	1	11/ 9/09	11/23/09 18:20	100258	180967	
Decachlorobiphenyls, Total	450	27	1	11/ 9/09	11/23/09 18:20	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/23/09 18:20	D	
4,4'-DDT	0 *	30-150	11/23/09 18:20	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019

Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.6

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Dichlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Trichlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Tetrachlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Pentachlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Hexachlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Heptachlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Octachlorobiphenyls, Total	27 U	27	1	11/9/09	11/20/09 16:47	100258	180730	
Nonachlorobiphenyls, Total	32	27	1	11/9/09	11/20/09 16:47	100258	180730	
Decachlorobiphenyls, Total	120	27	1	11/9/09	11/20/09 16:47	100258	180730	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	11/20/09 16:47	D	
4,4'-DDT	0 *	30-150	11/20/09 16:47	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09

Units: µg/Kg
Basis: Dry
Percent Solids: 74.6

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Dichlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Trichlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Tetrachlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Pentachlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Hexachlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Heptachlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Octachlorobiphenyls, Total	27	U	27	1	11/9/09	11/23/09 17:11	100258	180967	
Nonachlorobiphenyls, Total	33		27	1	11/9/09	11/23/09 17:11	100258	180967	
Decachlorobiphenyls, Total	110		27	1	11/9/09	11/23/09 17:11	100258	180967	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	11/23/09 17:11	D	
4,4'-DDT	0	* 30-150	11/23/09 17:11	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020

Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.4

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Dichlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Trichlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Tetrachlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Pentachlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Hexachlorobiphenyls, Total	44	J	27	1	12/2/09	12/4/09 11:11	101720	181903	
Heptachlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Octachlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Nonachlorobiphenyls, Total	27	U	27	1	12/2/09	12/4/09 11:11	101720	181903	
Decachlorobiphenyls, Total	52	J	27	1	12/2/09	12/4/09 11:11	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/4/09 11:11	D	
4,4'-DDT	0	* 30-150	12/4/09 11:11	D	

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J-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-20-110509
 Lab Code: R0906411-021

Service Request: R0906411
 Date Collected: 11/5/09 1510
 Date Received: 11/7/09
 Units: µg/Kg
 Basis: Dry
 Percent Solids: 76.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution	Date	Date	Extraction Analysis		
				Factor	Extracted	Analyzed	Lot	Lot	Note
Monochlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Dichlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Trichlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Tetrachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Pentachlorobiphenyls, Total	38	J	26	1	12/2/09	12/4/09 12:21	101720	181903	
Hexachlorobiphenyls, Total	54	J	26	1	12/2/09	12/4/09 12:21	101720	181903	
Heptachlorobiphenyls, Total	42	J	26	1	12/2/09	12/4/09 12:21	101720	181903	
Octachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Nonachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 12:21	101720	181903	
Decachlorobiphenyls, Total	68	J	26	1	12/2/09	12/4/09 12:21	101720	181903	

Surrogate Name	% Rec	Control	Date	Q	Note
		Limits	Analyzed		
gamma-BHC (Lindane)	0	*	30-150	12/4/09 12:21	D
4,4'-DDT	0	*	30-150	12/4/09 12:21	D

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 76.4

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Dichlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Trichlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Tetrachlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Pentachlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Hexachlorobiphenyls, Total	160	J	110	4	12/2/09	12/4/09 13:31	101720	181903	
Heptachlorobiphenyls, Total	160	J	110	4	12/2/09	12/4/09 13:31	101720	181903	
Octachlorobiphenyls, Total	110	U	110	4	12/2/09	12/4/09 13:31	101720	181903	
Nonachlorobiphenyls, Total	200	J	110	4	12/2/09	12/4/09 13:31	101720	181903	
Decachlorobiphenyls, Total	840	J	110	4	12/2/09	12/4/09 13:31	101720	181903	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/4/09 13:31	D	
4,4'-DDT	0	* 30-150	12/4/09 13:31	D	

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1-8-10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023

Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.1

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Dichlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Trichlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Tetrachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Pentachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Hexachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Heptachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Octachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Nonachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	
Decachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 14:40	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	12/4/09 14:40	D
4,4'-DDT	0	*	30-150	12/4/09 14:40	D

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024

Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Dichlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Trichlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Tetrachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Pentachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Hexachlorobiphenyls, Total	26	J	25	1	12/2/09	12/4/09 15:50	101720	181903	
Heptachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Octachlorobiphenyls, Total	25	U	25	1	12/2/09	12/4/09 15:50	101720	181903	
Nonachlorobiphenyls, Total	55	J	25	1	12/2/09	12/4/09 15:50	101720	181903	
Decachlorobiphenyls, Total	230	J	25	1	12/2/09	12/4/09 15:50	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/4/09 15:50	D	
4,4'-DDT	0	* 30-150	12/4/09 15:50	D	

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025

Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 77.0

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Dichlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Trichlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Tetrachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Pentachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Hexachlorobiphenyls, Total	32	J	26	1	12/2/09	12/4/09 17:00	101720	181903	
Heptachlorobiphenyls, Total	36	J	26	1	12/2/09	12/4/09 17:00	101720	181903	
Octachlorobiphenyls, Total	26	U	26	1	12/2/09	12/4/09 17:00	101720	181903	
Nonachlorobiphenyls, Total	65	J	26	1	12/2/09	12/4/09 17:00	101720	181903	
Decachlorobiphenyls, Total	260	J	26	1	12/2/09	12/4/09 17:00	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	12/4/09 17:00	D
4,4'-DDT	0	*	30-150	12/4/09 17:00	D

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1-8-10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-24-110609
Lab Code: R0906411-026

Service Request: R0906411
Date Collected: 11/6/09 0845
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.0

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Dichlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Trichlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Tetrachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Pentachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Hexachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Heptachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Octachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Nonachlorobiphenyls, Total	54	U	54	2	12/2/09	12/4/09 18:10	101720	181903	
Decachlorobiphenyls, Total	140	J	54	2	12/2/09	12/4/09 18:10	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/4/09 18:10	D	
4,4'-DDT	0	* 30-150	12/4/09 18:10	D	

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-25-110609
 Lab Code: R0906411-027
 Service Request: R0906411
 Date Collected: 11/6/09 0909
 Date Received: 11/7/09
 Units: µg/Kg
 Basis: Dry
 Percent Solids: 75.3

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U <i>VJ</i>	27	1	12/2/09	12/4/09 19:19	101720	181903	
Dichlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Trichlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Tetrachlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Pentachlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Hexachlorobiphenyls, Total	36 <i>J</i>	27	1	12/2/09	12/4/09 19:19	101720	181903	
Heptachlorobiphenyls, Total	27 U <i>VJ</i>	27	1	12/2/09	12/4/09 19:19	101720	181903	
Octachlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Nonachlorobiphenyls, Total	27 U	27	1	12/2/09	12/4/09 19:19	101720	181903	
Decachlorobiphenyls, Total	77 <i>J</i>	27	1	12/2/09	12/4/09 19:19	101720	181903	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/4/09 19:19	D	
4,4'-DDT	0 *	30-150	12/4/09 19:19	D	

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-26-110609
 Lab Code: R0906411-028

Service Request: R0906411
 Date Collected: 11/6/09 0942
 Date Received: 11/7/09
 Units: µg/Kg
 Basis: Dry
 Percent Solids: 75.1

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Dichlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Trichlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Tetrachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Pentachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Hexachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Heptachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Octachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Nonachlorobiphenyls, Total	27 U	27	1	12/2/09	12/7/09 11:14	101720	182390	
Decachlorobiphenyls, Total	35 D	27	1	12/2/09	12/7/09 11:14	101720	182390	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/7/09 11:14	D	
4,4'-DDT	0 *	30-150	12/7/09 11:14	D	

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-27-110609
 Lab Code: R0906411-029

Service Request: R0906411
 Date Collected: 11/6/09 1010
 Date Received: 11/7/09
 Units: µg/Kg
 Basis: Dry
 Percent Solids: 76.2

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Dichlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Trichlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Tetrachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Pentachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Hexachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Heptachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Octachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 12:23	101720	182390	
Nonachlorobiphenyls, Total	62	J	52	2	12/2/09	12/7/09 12:23	101720	182390	
Decachlorobiphenyls, Total	190	J	52	2	12/2/09	12/7/09 12:23	101720	182390	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/7/09 12:23	D	
4,4'-DDT	0	* 30-150	12/7/09 12:23	D	

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-28-110609
 Lab Code: R0906411-030

Service Request: R0906411
 Date Collected: 11/6/09 1040
 Date Received: 11/7/09
 Units: µg/Kg
 Basis: Dry
 Percent Solids: 76.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Dichlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Trichlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Tetrachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Pentachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Hexachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Heptachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Octachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Nonachlorobiphenyls, Total	52	U	52	2	12/2/09	12/7/09 13:33	101720	182390	
Decachlorobiphenyls, Total	160	J	52	2	12/2/09	12/7/09 13:33	101720	182390	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	12/7/09 13:33	D
4,4'-DDT	0	*	30-150	12/7/09 13:33	D

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1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
 Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
 Sample Matrix: Soil
 Sample Name: SE-SS-29-110609
 Lab Code: R0906411-031

Service Request: R0906411
 Date Collected: 11/6/09 1117
 Date Received: 11/7/09

Units: µg/Kg
 Basis: Dry
 Percent Solids: 72.1

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
 Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Dichlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Trichlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Tetrachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Pentachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Hexachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Heptachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Octachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Nonachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	
Decachlorobiphenyls, Total	140 U	140	5	12/2/09	12/7/09 17:02	101720	182390	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/7/09 17:02	D	
4,4'-DDT	0 *	30-150	12/7/09 17:02	D	

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Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032

Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 76.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Dichlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Trichlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Tetrachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Pentachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Hexachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Heptachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Octachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Nonachlorobiphenyls, Total	100	U	100	4	12/2/09	12/7/09 18:12	101720	182390	
Decachlorobiphenyls, Total	120	J	100	4	12/2/09	12/7/09 18:12	101720	182390	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	*	30-150	12/7/09 18:12	D
4,4'-DDT	0	*	30-150	12/7/09 18:12	D

2/1
1-8-10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033

Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 75.5

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Dichlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Trichlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Tetrachlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Pentachlorobiphenyls, Total	600		260	10	11/11/09	12/2/09 20:11	100368	181720	
Hexachlorobiphenyls, Total	660		260	10	11/11/09	12/2/09 20:11	100368	181720	
Heptachlorobiphenyls, Total	420		260	10	11/11/09	12/2/09 20:11	100368	181720	
Octachlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Nonachlorobiphenyls, Total	260	U	260	10	11/11/09	12/2/09 20:11	100368	181720	
Decachlorobiphenyls, Total	310		260	10	11/11/09	12/2/09 20:11	100368	181720	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/2/09 20:11	D	
4,4'-DDT	0	* 30-150	12/2/09 20:11	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034

Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 79.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Dichlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Trichlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Tetrachlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Pentachlorobiphenyls, Total	230	130	5	11/11/09	12/3/09 15:55	100368	182096	
Hexachlorobiphenyls, Total	340	130	5	11/11/09	12/3/09 15:55	100368	182096	
Heptachlorobiphenyls, Total	240	130	5	11/11/09	12/3/09 15:55	100368	182096	
Octachlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Nonachlorobiphenyls, Total	130 U	130	5	11/11/09	12/3/09 15:55	100368	182096	
Decachlorobiphenyls, Total	200	130	5	11/11/09	12/3/09 15:55	100368	182096	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/3/09 15:55	D	
4,4'-DDT	0 *	30-150	12/3/09 15:55	D	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035

Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.1

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Dichlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Trichlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Tetrachlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Pentachlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Hexachlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Heptachlorobiphenyls, Total	54	U	54	2	11/11/09	12/3/09 17:04	100368	182096	
Octachlorobiphenyls, Total	99		54	2	11/11/09	12/3/09 17:04	100368	182096	
Nonachlorobiphenyls, Total	59		54	2	11/11/09	12/3/09 17:04	100368	182096	
Decachlorobiphenyls, Total	110		54	2	11/11/09	12/3/09 17:04	100368	182096	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0	* 30-150	12/3/09 17:04	D	
4,4'-DDT	0	* 30-150	12/3/09 17:04	D	

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036

Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: µg/Kg
Basis: Dry
Percent Solids: 74.7

Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry

Analytical Method: 680
Prep Method: EPA 3550B

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Monochlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Dichlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Trichlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Tetrachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Pentachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Hexachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Heptachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Octachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Nonachlorobiphenyls, Total	27 U	27	1	11/11/09	12/3/09 18:14	100368	182096	
Decachlorobiphenyls, Total	64	27	1	11/11/09	12/3/09 18:14	100368	182096	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
gamma-BHC (Lindane)	0 *	30-150	12/3/09 18:14	D	
4,4'-DDT	0 *	30-150	12/3/09 18:14	D	

Comments: _____

December 7, 2009

Service Request No: R0906411

Janice Jaeger
Columbia Analytical Services
1 Mustard St, Suite 250
Rochester, NY 14609-0859

Laboratory Results for: Sauget-E St. Louis Residential

Dear Janice:

Enclosed are the results of the sample(s) submitted to our laboratory on November 10, 2009. For your reference, these analyses have been assigned our service request number **R0906411**. Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided.

All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My direct line is 281-994-2957. You may also contact me via email at JFreemyer@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jane Freemyer
Project Manager

For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com.





Certificate of Analysis

19408 Park Row, Suite 320, Houston, TX 77084

Phone (713)266-1599 Fax (713)266-0130

www.caslab.com

An Employee Owned Company

COLUMBIA ANALYTICAL SERVICES, INC

Client: Weston Solutions, Inc **Service Request No.:** R0906411
Project: Sauget-E. St. Louis Residential/20405.016.00 **Date Received:** 11/10/09
Sample Matrix: Soil

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirty-six samples were received for analysis at Columbia Analytical Services on 11/10/09.

The samples were received at 2C in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4C upon receipt at the laboratory.

Please note the reporting forms are currently referencing the date CAS-Rochester received the samples (11/07/09) and not the date CAS-Houston received the samples (11/10/09.)

Data Validation Notes and Discussion

B flags – Method Blanks

The Method Blank EQ0900466-01/P106031 contained low levels of OCDD at or below the Method Reporting Limit (MRL).

The Method Blank EQ0900467-01/P106058 contained low levels of 1234678-HpCDD, OCDD, 1234678-HpCDF and OCDF at or below the Method Reporting Limit (MRL).

The Method Blank EQ0900470-01/P106111 contained low levels of OCDD at or below the Method Reporting Limit (MRL).

The associated compounds in the samples are flagged with 'B' flags.

Y flags – Labeled Standards

Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

MS/DMS

EQ0900466: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/DMS for this extraction batch.

EQ0900467: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/DMS for this extraction batch.

EQ0900470: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/DMS for this extraction batch.

C flags – 2378-TCDF Confirmation

Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225.) The results from both the DB-5 column and the DB-225 column are included in this data package.

The valid result for the 2378-TCDF compound is reported from the confirmation column.

The confirmation results have been included on the Total TEQ summary pages.

MRL

Samples SE-SS-17-110509, SE-SS-18-110509, SE-SS-20-110509, SE-SS-21-110509, SE-SS-27-110609, SE-SS-28-110609, SE-SS-29-110609, SE-SS-30-110609, SE-SS-31-110609, SE-SS-32-110609, SE-SS-33-110609 required dilutions due to the presence of elevated levels of target analytes.

The undiluted and diluted results were combined into one Total TEQ summary report for each sample. This reports a 'Total' result that includes the most appropriate concentration found for the associated target analyte.

The 1234678-HpCDD and (or) 1234678-HpCDF compounds were slightly over-range for nineteen samples. The test results are flagged as 'E.' Dilutions less than 1:5 are not routinely performed by CAS-Houston, because the HRMS instrument is linear above the calibration range. Please note that the EDL for 1234789-HpCDF is often elevated with higher concentrations of 1234678-HpCDF. No further corrective action was required.

E flags

When OCDD and/or OCDF exceed the upper method calibration limit (MCL), Method 8290 Section 7.9.3 advises the chemist to "report the measured concentration and indicate that the value exceeds the MCL." We use 'E' flag on the Form 1 results to indicate a compound has exceeded the MCL.

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each congener in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by CAS/Houston to include:

- [The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds](#) (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- 2378-TCDF from the DB-225 column, when confirmation required
- Non-detected compounds are not included in the 'Total'
- The 1:1 and associated dilution have been combined into one TEQ Summary report

Approved by _____ Date _____

Xiangqiu Liang, Laboratory Director

Client: Weston Solutions, Inc.
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00

Service Request: R0906411

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R0906411-001	SE-SS-01-110409	11/4/09	09:40
R0906411-002	SE-SS-02-110409	11/4/09	10:22
R0906411-003	SE-SS-03-110409	11/4/09	10:59
R0906411-004	SE-SS-04-110409	11/4/09	11:26
R0906411-005	SE-SS-05-110409	11/4/09	13:29
R0906411-006	SE-SS-05-110409-D	11/4/09	13:29
R0906411-007	SE-SS-06-110409	11/4/09	13:50
R0906411-008	SE-SS-07-110409	11/4/09	14:08
R0906411-009	SE-SS-08-110409	11/4/09	14:29
R0906411-010	SE-SS-09-110409	11/4/09	15:40
R0906411-011	SE-SS-10-110409	11/4/09	16:20
R0906411-012	SE-SS-11-110409	11/4/09	16:50
R0906411-013	SE-SS-12-110409	11/5/09	17:15
R0906411-014	SE-SS-13-110509	11/5/09	08:41
R0906411-015	SE-SS-14-110509	11/5/09	09:17
R0906411-016	SE-SS-15-110509	11/5/09	09:58
R0906411-017	SE-SS-16-110509	11/5/09	10:47
R0906411-018	SE-SS-17-110509	11/5/09	12:10
R0906411-019	SE-SS-18-110509	11/5/09	13:08
R0906411-020	SE-SS-19-110509	11/5/09	14:40
R0906411-021	SE-SS-20-110509	11/5/09	15:10
R0906411-022	SE-SS-21-110509	11/5/09	15:40
R0906411-023	SE-SS-22-110509	11/5/09	16:10
R0906411-024	SE-SS-23-110509	11/5/09	16:50
R0906411-025	SE-SS-23-110509-D	11/5/09	16:50
R0906411-026	SE-SS-24-110609	11/6/09	08:45
R0906411-027	SE-SS-25-110609	11/6/09	09:09
R0906411-028	SE-SS-26-110609	11/6/09	09:42
R0906411-029	SE-SS-27-110609	11/6/09	10:10
R0906411-030	SE-SS-28-110609	11/6/09	10:40
R0906411-031	SE-SS-29-110609	11/6/09	11:17
R0906411-032	SE-SS-30-110609	11/6/09	11:45
R0906411-033	SE-SS-31-110609	11/6/09	13:08
R0906411-034	SE-SS-32-110609	11/6/09	13:35
R0906411-035	SE-SS-33-110609	11/6/09	14:15
R0906411-036	SE-SS-34-110609	11/6/09	14:55

Superset Summary

8290/PCDD PCDF

Calibrations:	03/16/09	07/31/09	08/01/08
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Data Files:

<i>Raw Data</i>	<i>Begin CCAL</i>	<i>Method Blank</i>	<i>Lab ID</i>
P106026	P106019	P106031	R0906411-001.R01
P106027	P106019	P106031	EQ0900466-02
P106028	P106019	P106031	EQ0900466-03
P106031	P106029	P106031	EQ0900466-01
P106032	P106029	P106031	R0906411-002
P106033	P106029	P106031	R0906411-003
P106034	P106029	P106031	R0906411-004
P106035	P106029	P106031	R0906411-005
P106036	P106029	P106031	R0906411-006
P106037	P106029	P106031	R0906411-007
P106038	P106029	P106031	R0906411-008
P106039	P106029	P106031	R0906411-009
P106040	P106029	P106031	R0906411-010
P106041	P106029	P106031	R0906411-011
P106047	P106043	P106031	R0906411-012
P106048	P106043	P106031	R0906411-013
P106049	P106043	P106031	R0906411-014
P106050	P106043	P106031	R0906411-015
P106051	P106043	P106031	R0906411-016
P106052	P106043	P106031	R0906411-017
P106053	P106043	P106031	R0906411-018.R02
P106058	P106057	P106058	EQ0900467-01
P106062	P106057	P106058	EQ0900467-02
P106063	P106057	P106058	EQ0900467-03
P106067	P106064	P106058	R0906411-019.R02
P106068	P106064	P106058	R0906411-020
P106069	P106064	P106058	R0906411-021.R02
P106070	P106064	P106058	R0906411-022.R02
P106072	P106064	P106058	R0906411-024
P106073	P106064	P106058	R0906411-025
P106074	P106064	P106058	R0906411-026
P106075	P106064	P106058	R0906411-027
P106076	P106064	P106058	R0906411-028
P106085	P106078	P106058	R0906411-029.R02
P106086	P106078	P106058	R0906411-030.R02
P106087	P106078	P106058	R0906411-031.R02
P106088	P106078	P106058	R0906411-032.R02
P106089	P106078	P106058	R0906411-033.R02
P106111	P106105	P106111	EQ0900470-01
P106112	P106105	P106111	EQ0900470-02
P106113	P106105	P106111	EQ0900470-03
P106295	P106292	P106031	R0906411-018
P106296	P106292	P106058	R0906411-029
P106297	P106292	P106058	R0906411-030
P106298	P106292	P106058	R0906411-031
P106299	P106292	P106058	R0906411-032
P106300	P106292	P106058	R0906411-033
P204969	P204965	P204967	R0906411-001
P204970	P204965	P204967	R0906411-002.R01
P204971	P204965	P204967	R0906411-003.R01
P204972	P204965	P204967	R0906411-004.R01

P204973	P204965	P204967	R0906411-005.R01
P204974	P204965	P204967	R0906411-006.R01
P204975	P204965	P204967	R0906411-007.R01
P204976	P204965	P204967	R0906411-008.R01
P204977	P204965	P204967	R0906411-009.R01
P204978	P204965	P204967	R0906411-010.R01
P204979	P204965	P204967	R0906411-011.R01
P204980	P204965	P204967	R0906411-012.R01
P204984	P204981	P204983	R0906411-013.R01
P204985	P204981	P204983	R0906411-014.R01
P204986	P204981	P204983	R0906411-015.R01
P204987	P204981	P204983	R0906411-016.R01
P204988	P204981	P204983	R0906411-017.R01
P204989	P204981	P204983	R0906411-018.R01
P205014	P205010	P205011	R0906411-019.R01
P205015	P205010	P205011	R0906411-020.R01
P205016	P205010	P205011	R0906411-021.R01
P205017	P205010	P205011	R0906411-022.R01
P205018	P205010	P205011	R0906411-023.R01
P205019	P205010	P205011	R0906411-024.R01
P205020	P205010	P205011	R0906411-025.R01
P205021	P205010	P205011	R0906411-026.R01
P205032	P205024	P205027	R0906411-027.R01
P205033	P205024	P205027	R0906411-028.R01
P205034	P205024	P205027	R0906411-029.R01
P205035	P205024	P205027	R0906411-030.R01
P205036	P205024	P205027	R0906411-031.R01
P205037	P205024	P205027	R0906411-032.R01
P205038	P205024	P205027	R0906411-033.R01
P205049	P205042	P205043	R0906411-034.R01
P205050	P205042	P205043	R0906411-035.R01
P205051	P205042	P205043	R0906411-036.R01
P205131	P205122	P106111	R0906411-034
P205132	P205122	P106111	R0906411-035
P205248	P205246	P106058	R0906411-023
P205249	P205246	P106058	R0906411-019
P205253	P205250	P106058	R0906411-021
P205254	P205250	P106058	R0906411-022
U133882	U133878	P106111	R0906411-034.R02
U133883	U133878	P106111	R0906411-035.R02
U133884	U133878	P106111	R0906411-036

Laboratory Certifications

2009-2010

STATE/PROGRAM	AGENCY	CERTIFICATION ID	EXP DATE
ARIZONA	AZ-DHS	AZ0725	05/26/10
ARKANSAS	ADEQ	09-048-0	06/16/10
CALIFORNIA	CA-ELAP	2452	02/28/11
FLORIDA/NELAP	FL-DOHS	E87611	06/30/10
HAWAII	HI-DOH	N/A	06/30/10
ILLINOIS/NELAP	IL-EPA	002380	10/06/10
LOUISIANA/NELAP	LELAP	03048	06/30/10
MAINE	ME-DOHS	2008031	06/05/10
MICHIGAN	MIDEQ	9971	06/30/10
MINNESOTA	MDH	048-999-427	03/25/10
NEVADA	NDEP	TX014112009A	07/31/10
NEW JERSEY	NJDEP	TX008	06/30/10
NEW MEXICO	NMED-DWB	N/A	06/30/10
NEW YORK/NELAP	NY-DOH	11707	03/31/10
NFESC/NAVY	NFESC	N/A	01/09/10
OKLAHOMA	OKDEQ	2009-25	08/31/10
OREGON/NELAP	ORELAP	TX200002-006	03/24/10
TENNESSEE	TNDEC	04016	06/30/10
TEXAS/NELAP	TCEQ	T104704216-09-TX	06/30/10
UTAH/NELAP	UTELCP	COLU2	06/30/10
SOIL IMPORT PERMIT	USDA	P330-09-00067	03/27/12
WASHINGTON/NELAP	WA-Ecology	C1855	11/14/09
WEST VIRGINIA	WVDEP	347	06/30/10

Abbreviations, Acronyms & Definitions

Cal	Calibration
Conc	CONCentratiOn
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
MRL	Method Reporting Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent Recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
RRT	Relative Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-Noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

Data Qualifier Flags – Dioxin/Furans

- **B** Indicates the associated analyte is found in the method blank, as well as in the sample.
- **C** Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225). The results from both the DB-5 column and the DB-225 column are included in this data package. The results from the DB-225 analyses should be used to evaluate the 2378-TCDF in the samples. The confirmed result should be used in determining the TEQ value for TCDF.
- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range.
- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the estimated detection limit (EDL).
- **K** EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.
- **U** Indicates the compound was analyzed and not detected.
- **Y** Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y'. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.
- **ND** Indicates concentration is reported as 'Not Detected.'
- **S** Peak is saturated; data not reportable.
- **P** Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
- **Q** Lock-mass interference by chlorodiphenyl ether compounds.

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

Confirmation

First Level - Data Processing - to be filled by person generating the forms

Date	11/19/09	Person 1	LZ (-019, -020, -021, -022, -023, -024,
Date		Person 2	-025, -026

Second Level - Data Review - to be filled by person doing peer review

Date	11/19/09	Primary Data Reviewer	QB
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
------	----------

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date

11/16/09

Person 1

LZ (-001)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

11/16/09

Primary Data Reviewer

JB

Date

Secondary Data Reviewer

Date

Reviewer

Project Level - Review - to be filled by person doing project compliance review

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

Confirmation

First Level - Data Processing - to be filled by person generating the forms

Date

11/17/09

Person 1

xx (-013, -014, -015, -016, -017, -018)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

11/23/09

Primary Data Reviewer

gc (013-018)

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

Confirmation

First Level - Data Processing - to be filled by person generating the forms

Date	11/17/09	Person 1	LZ (-001, -002, -003, -004, -005, -006,
Date		Person 2	-007, -008, -009, -010, -011, -012)

Second Level - Data Review - to be filled by person doing peer review

Date	11/19/09	Primary Data Reviewer	DB
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
------	----------

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

Confirmation

First Level - Data Processing - to be filled by person generating the forms

Date

11/20/09

Person 1

xx (-034, -035, -036)

Date

Person 2

Second Level - Data Review - to be filled by person doing peer review

Date

11/20/09

Primary Data Reviewer

DB

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

Confirmation

First Level - Data Processing - to be filled by person generating the forms

Date	11/23/09	Person 1	<i>LZ (-027, -028, -029, -030, -031, -032,</i>
Date		Person 2	<i>-033)</i>

Second Level - Data Review - to be filled by person doing peer review

Date	Primary Data Reviewer	<i>Jc (027-033)</i>
Date	Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

80906411

First Level - Data Processing - to be filled by person generating the forms

Date

11/30/09

Person 1

MC (034-036)

Date

Person 2

Second Level - Data Review – to be filled by person doing peer review

Date

12/02/09

Primary Data Reviewer

SA

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project compliance review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411 - 033

First Level - Data Processing - to be filled by person generating the forms

Date	12/01/09	Person 1	xx (029, -030, -031, -032, -033)
Date		Person 2	

Second Level - Data Review - to be filled by person doing peer review

Date	Primary Data Reviewer	BR
Date	Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/2/09	Person 1	ccc	12-18
Date		Person 2		

Second Level - Data Review - to be filled by person doing peer review

Date	12/04/09	Primary Data Reviewer	SA	(012-018)
Date		Secondary Data Reviewer		

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

120906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/12/09	Person 1	coe	340L, 350L
Date		Person 2		

Second Level - Data Review - to be filled by person doing peer review

Date	12/14/09	Primary Data Reviewer	Qp (034dl, 035dl)
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/02/09	Person 1	dx (-002, -003, -004, -005, -006, -007,
Date		Person 2	-008, -009, -010)

Second Level - Data Review - to be filled by person doing peer review

Date	12/02/09	Primary Data Reviewer	Jc (002-010)
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/3/09	Person 1	CEE	19-28
Date		Person 2		

Second Level - Data Review - to be filled by person doing peer review

Date	12/16/09	Primary Data Reviewer	(PC 1019-022)(024-028)
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
------	----------

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date 12/5/09

Person 1

cee

23, 19DL

Date

Person 2

Second Level - Data Review - to be filled by person doing data review

Date 12/7/09

Primary Data Reviewer

gc (023, 019dl)

Date

Secondary Data Reviewer

Project Level - Review - to be filled by person doing project level review

Date

Reviewer

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

RO906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/05/09	Person 1	xx(-018 DL, -029 DL, -030 DL, -031 DL,
Date		Person 2	-032 DL, -033 DL)

Second Level - Data Review - to be filled by person doing peer review

Date	12/17/09	Primary Data Reviewer	gc(018dl, 029dl-033dl)
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	Reviewer
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CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID

R0906411

First Level - Data Processing - to be filled by person generating the forms

Date	12/7/09	Person 1	Lee	21DL, 22DC
Date		Person 2		

Second Level - Data Review - to be filled by person doing the review

Date	Primary Data Reviewer	SJ
Date	Secondary Data Reviewer	

Project Level - Review - to be filled by person doing the review

Date	Reviewer
------	----------



Analytical Results

19408 Park Row, Suite 320, Houston, TX 77084

Phone (713)266-1599 Fax (713)266-0130

www.caslab.com

An Employee Owned Company

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 0940
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-01-110409	Units:	ng/Kg
Lab Code:	R0906411-001	Basis:	Dry
		Percent Solids:	79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 1413
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.901g	Instrument Name:	E-HRMS-03
Data File Name:	P106026	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106019

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.127	1.17			1
1,2,3,7,8-PeCDD	2.25 J	0.115	2.92	1.66	1.000	1
1,2,3,4,7,8-HxCDD	2.17 J	0.345	2.92	1.17	0.998	1
1,2,3,6,7,8-HxCDD	10.3	0.313	2.92	1.15	1.000	1
1,2,3,7,8,9-HxCDD	7.14	0.331	2.92	1.22	1.009	1
1,2,3,4,6,7,8-HpCDD	278	0.836	2.92	1.08	1.000	1
OCDD	4440 E	0.506	5.84	0.90	1.000	1
2,3,7,8-TCDF	6.89 C	0.531	1.17	0.78	1.001	1
1,2,3,7,8-PeCDF	2.51 J	0.293	2.92	1.73	1.001	1
2,3,4,7,8-PeCDF	2.51 J	0.290	2.92	1.56	1.025	1
1,2,3,4,7,8-HxCDF	8.64	0.771	2.92	1.37	1.000	1
1,2,3,6,7,8-HxCDF	5.40	0.736	2.92	1.17	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.988	2.92			1
2,3,4,6,7,8-HxCDF	5.46	0.843	2.92	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	80.4	0.555	2.92	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	8.95	0.771	2.92	1.11	1.034	1
OCDF	288	0.173	5.84	0.90	1.004	1
Total Tetra-Dioxins	15.4	0.127	1.17	0.79		1
Total Penta-Dioxins	32.5	0.115	2.92	1.52		1
Total Hexa-Dioxins	89.1	0.313	2.92	1.28		1
Total Hepta-Dioxins	608	0.836	2.92	1.03		1
Total Tetra-Furans	45.2	0.531	1.17	0.70		1
Total Penta-Furans	50.5	0.290	2.92	1.64		1
Total Hexa-Furans	91.9	0.736	2.92	1.24		1
Total Hepta-Furans	239	0.555	2.92	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 0940
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-01-110409	Units:	Percent
Lab Code:	R0906411-001	Basis:	Dry
		Percent Solids:	79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 1413
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.901g	Instrument Name:	E-HRMS-03
Data File Name:	P106026	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106019

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	698.820	70		40-135	0.82	1.010
13C-1,2,3,7,8-PeCDD	1000	736.874	74		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1729.646	69		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1588.774	64		40-135	1.03	1.068
13C-OCDD	5000	2274.570	45		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	687.124	69		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	812.029	81		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1844.375	74		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1535.688	61		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	705.418	88		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-01-110409
Lab Code: R0906411-001
Service Request: R0906411
Date Collected: 11/4/09 0940
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.127	1	1	
1,2,3,7,8-PeCDD	2.25	0.115	1	1	2.25
1,2,3,4,7,8-HxCDD	2.17	0.345	1	0.1	0.217
1,2,3,6,7,8-HxCDD	10.3	0.313	1	0.1	1.03
1,2,3,7,8,9-HxCDD	7.14	0.331	1	0.1	0.714
1,2,3,4,6,7,8-HpCDD	278	0.836	1	0.01	2.78
OCDD	4440	0.506	1	0.0003	1.33
2,3,7,8-TCDF	2.82	0.0912	1	0.1	0.282
1,2,3,7,8-PeCDF	2.51	0.293	1	0.03	0.0753
2,3,4,7,8-PeCDF	2.51	0.290	1	0.3	0.753
1,2,3,4,7,8-HxCDF	8.64	0.771	1	0.1	0.864
1,2,3,6,7,8-HxCDF	5.40	0.736	1	0.1	0.540
1,2,3,7,8,9-HxCDF	ND	0.988	1	0.1	
2,3,4,6,7,8-HxCDF	5.46	0.843	1	0.1	0.546
1,2,3,4,6,7,8-HpCDF	80.4	0.555	1	0.01	0.804
1,2,3,4,7,8,9-HpCDF	8.95	0.771	1	0.01	0.0895
OCDF	288	0.173	1	0.0003	0.0864

Total TEQ

12.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 0940
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-01-110409	Units:	ng/Kg
Lab Code:	R0906411-001	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	79.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0010
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.901g	Instrument Name:	E-HRMS-04
Data File Name:	P204969	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.82		0.0912	1.16	0.81	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	746.482	75		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	729.346	91		40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	ng/Kg
Lab Code:	R0906411-002	Basis:	Dry
		Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2005
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-03
Data File Name:	P106032	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.18 J	0.134	1.19	0.86	1.001	1
1,2,3,7,8-PeCDD	2.54 J	0.176	2.98	1.35	1.000	1
1,2,3,4,7,8-HxCDD	3.23	0.211	2.98	1.24	0.999	1
1,2,3,6,7,8-HxCDD	11.2	0.192	2.98	1.32	1.000	1
1,2,3,7,8,9-HxCDD	7.63	0.203	2.98	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	293	0.578	2.98	1.05	1.000	1
OCDD	4430 BE	0.214	5.97	0.89	1.000	1
2,3,7,8-TCDF	11.5 C	0.276	1.19	0.75	1.001	1
1,2,3,7,8-PeCDF	4.07	0.218	2.98	1.48	1.000	1
2,3,4,7,8-PeCDF	3.56	0.216	2.98	1.57	1.024	1
1,2,3,4,7,8-HxCDF	12.9	0.208	2.98	1.29	1.000	1
1,2,3,6,7,8-HxCDF	8.85	0.199	2.98	1.31	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.266	2.98			1
2,3,4,6,7,8-HxCDF	9.40	0.227	2.98	1.32	1.016	1
1,2,3,4,6,7,8-HpCDF	111	0.622	2.98	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	12.3	0.865	2.98	1.12	1.034	1
OCDF	377	0.148	5.97	0.88	1.004	1
Total Tetra-Dioxins	26.2	0.134	1.19	0.82		1
Total Penta-Dioxins	36.2	0.176	2.98	1.51		1
Total Hexa-Dioxins	102	0.192	2.98	1.32		1
Total Hepta-Dioxins	645	0.578	2.98	1.04		1
Total Tetra-Furans	77.9	0.276	1.19	0.80		1
Total Penta-Furans	112	0.216	2.98	1.59		1
Total Hexa-Furans	153	0.199	2.98	1.30		1
Total Hepta-Furans	299	0.622	2.98	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	Percent
Lab Code:	R0906411-002	Basis:	Dry
		Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2005
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-03
Data File Name:	P106032	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	692.339	69		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	706.458	71		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1642.549	66		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1591.313	64		40-135	1.07	1.068
13C-OCDD	5000	2454.907	49		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	676.894	68		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	750.407	75		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1757.972	70		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1609.099	64		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	662.067	83		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-02-110409
Lab Code: R0906411-002

Service Request: R0906411
Date Collected: 11/4/09 1022
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.18	0.134	1	1	1.18
1,2,3,7,8-PeCDD	2.54	0.176	1	1	2.54
1,2,3,4,7,8-HxCDD	3.23	0.211	1	0.1	0.323
1,2,3,6,7,8-HxCDD	11.2	0.192	1	0.1	1.12
1,2,3,7,8,9-HxCDD	7.63	0.203	1	0.1	0.763
1,2,3,4,6,7,8-HpCDD	293	0.578	1	0.01	2.93
OCDD	4430	0.214	1	0.0003	1.33
2,3,7,8-TCDF	5.94	0.0712	1	0.1	0.594
1,2,3,7,8-PeCDF	4.07	0.218	1	0.03	0.122
2,3,4,7,8-PeCDF	3.56	0.216	1	0.3	1.07
1,2,3,4,7,8-HxCDF	12.9	0.208	1	0.1	1.29
1,2,3,6,7,8-HxCDF	8.85	0.199	1	0.1	0.885
1,2,3,7,8,9-HxCDF	ND	0.266	1	0.1	
2,3,4,6,7,8-HxCDF	9.40	0.227	1	0.1	0.940
1,2,3,4,6,7,8-HpCDF	111	0.622	1	0.01	1.11
1,2,3,4,7,8,9-HpCDF	12.3	0.865	1	0.01	0.123
OCDF	377	0.148	1	0.0003	0.113

Total TEQ 16.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1022
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-02-110409	Units:	ng/Kg
Lab Code:	R0906411-002	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	79.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0047
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.579g	Instrument Name:	E-HRMS-04
Data File Name:	P204970	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.94		0.0712	1.19	0.74	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	668.828	67		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	640.960	80		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.299g
Data File Name: P106033
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2053
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.21 JK	0.0786	1.25	0.64	1.001	1
1,2,3,7,8-PeCDD	4.51 K	0.0924	3.12	1.84	1.000	1
1,2,3,4,7,8-HxCDD	10.4	0.0969	3.12	1.28	0.998	1
1,2,3,6,7,8-HxCDD	28.2	0.0879	3.12	1.26	1.000	1
1,2,3,7,8,9-HxCDD	27.6	0.0932	3.12	1.28	1.009	1
1,2,3,4,6,7,8-HpCDD	836 E	0.158	3.12	1.06	1.000	1
OCDD	7880 BE	0.235	6.24	0.90	1.000	1
2,3,7,8-TCDF	18.4 C	0.235	1.25	0.80	1.001	1
1,2,3,7,8-PeCDF	5.36	0.319	3.12	1.52	1.000	1
2,3,4,7,8-PeCDF	7.49	0.316	3.12	1.56	1.024	1
1,2,3,4,7,8-HxCDF	30.0	0.239	3.12	1.25	1.000	1
1,2,3,6,7,8-HxCDF	19.1	0.229	3.12	1.28	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.306	3.12			1
2,3,4,6,7,8-HxCDF	23.8	0.262	3.12	1.41	1.017	1
1,2,3,4,6,7,8-HpCDF	256	0.598	3.12	1.07	1.000	1
1,2,3,4,7,8,9-HpCDF	14.7	0.831	3.12	1.03	1.033	1
OCDF	612	0.166	6.24	0.91	1.004	1
Total Tetra-Dioxins	44.3	0.0786	1.25	0.81		1
Total Penta-Dioxins	36.9	0.0924	3.12	1.60		1
Total Hexa-Dioxins	306	0.0879	3.12	1.29		1
Total Hepta-Dioxins	1750	0.158	3.12	1.07		1
Total Tetra-Furans	111	0.235	1.25	0.81		1
Total Penta-Furans	185	0.316	3.12	1.59		1
Total Hexa-Furans	339	0.229	3.12	1.27		1
Total Hepta-Furans	608	0.598	3.12	1.07		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1059
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-03-110409	Units:	Percent
Lab Code:	R0906411-003	Basis:	Dry
		Percent Solids:	77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2053
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.299g	Instrument Name:	E-HRMS-03
Data File Name:	P106033	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	759.012	76		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	798.333	80		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1680.646	67		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1590.231	64		40-135	1.07	1.069
13C-OCDD	5000	2308.088	46		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	763.685	76		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	838.229	84		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1833.435	73		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1564.831	63		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	729.033	91		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.21	0.0786	1	1	1.21
1,2,3,7,8-PeCDD	4.51	0.0924	1	1	4.51
1,2,3,4,7,8-HxCDD	10.4	0.0969	1	0.1	1.04
1,2,3,6,7,8-HxCDD	28.2	0.0879	1	0.1	2.82
1,2,3,7,8,9-HxCDD	27.6	0.0932	1	0.1	2.76
1,2,3,4,6,7,8-HpCDD	836	0.158	1	0.01	8.36
OCDD	7880	0.235	1	0.0003	2.36
2,3,7,8-TCDF	4.44	0.107	1	0.1	0.444
1,2,3,7,8-PeCDF	5.36	0.319	1	0.03	0.161
2,3,4,7,8-PeCDF	7.49	0.316	1	0.3	2.25
1,2,3,4,7,8-HxCDF	30.0	0.239	1	0.1	3.00
1,2,3,6,7,8-HxCDF	19.1	0.229	1	0.1	1.91
1,2,3,7,8,9-HxCDF	ND	0.306	1	0.1	
2,3,4,6,7,8-HxCDF	23.8	0.262	1	0.1	2.38
1,2,3,4,6,7,8-HpCDF	256	0.598	1	0.01	2.56
1,2,3,4,7,8,9-HpCDF	14.7	0.831	1	0.01	0.147
OCDF	612	0.166	1	0.0003	0.184

Total TEQ 36.1

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-03-110409
Lab Code: R0906411-003
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1059
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.299g
Data File Name: P204971
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0124
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.44	0.107	1.25	0.84	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	748.828	75	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	705.656	88	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.339g
Data File Name: P106034
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2140
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	3.91	0.127	1.14	0.80	1.001	1
1,2,3,7,8-PeCDD	7.52	0.137	2.85	1.58	1.000	1
1,2,3,4,7,8-HxCDD	12.2	0.130	2.85	1.26	0.999	1
1,2,3,6,7,8-HxCDD	43.3	0.118	2.85	1.30	1.000	1
1,2,3,7,8,9-HxCDD	31.7	0.125	2.85	1.28	1.009	1
1,2,3,4,6,7,8-HpCDD	1290 E	1.57	2.85	1.06	1.001	1
OCDD	18500 BE	0.480	5.70	0.90	1.000	1
2,3,7,8-TCDF	34.8 C	0.353	1.14	0.75	1.001	1
1,2,3,7,8-PeCDF	11.6	0.402	2.85	1.46	1.001	1
2,3,4,7,8-PeCDF	16.2	0.397	2.85	1.53	1.025	1
1,2,3,4,7,8-HxCDF	51.2	0.321	2.85	1.23	1.000	1
1,2,3,6,7,8-HxCDF	29.8	0.307	2.85	1.16	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.411	2.85			1
2,3,4,6,7,8-HxCDF	35.1	0.351	2.85	1.13	1.017	1
1,2,3,4,6,7,8-HpCDF	369	0.561	2.85	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	33.2	0.781	2.85	1.05	1.034	1
OCDF	1440 E	0.217	5.70	0.90	1.004	1
Total Tetra-Dioxins	94.7	0.127	1.14	0.76		1
Total Penta-Dioxins	85.5	0.137	2.85	1.50		1
Total Hexa-Dioxins	392	0.118	2.85	1.27		1
Total Hepta-Dioxins	2960	1.57	2.85	1.04		1
Total Tetra-Furans	234	0.353	1.14	0.69		1
Total Penta-Furans	459	0.397	2.85	1.59		1
Total Hexa-Furans	604	0.307	2.85	1.25		1
Total Hepta-Furans	1110	0.561	2.85	1.02		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1126
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-04-110409	Units:	Percent
Lab Code:	R0906411-004	Basis:	Dry
		Percent Solids:	77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2140
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.339g	Instrument Name:	E-HRMS-03
Data File Name:	P106034	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	715.283	72		40-135	0.82	1.009
13C-1,2,3,7,8-PeCDD	1000	710.878	71		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1578.149	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1463.319	59		40-135	1.09	1.068
13C-OCDD	5000	1867.917	37	Y	40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.929	66		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	738.578	74		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1748.500	70		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1461.662	58		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	692.294	87		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	3.91	0.127	1	1	3.91
1,2,3,7,8-PeCDD	7.52	0.137	1	1	7.52
1,2,3,4,7,8-HxCDD	12.2	0.130	1	0.1	1.22
1,2,3,6,7,8-HxCDD	43.3	0.118	1	0.1	4.33
1,2,3,7,8,9-HxCDD	31.7	0.125	1	0.1	3.17
1,2,3,4,6,7,8-HpCDD	1290	1.57	1	0.01	12.9
OCDD	18500	0.480	1	0.0003	5.55
2,3,7,8-TCDF	16.8	0.147	1	0.1	1.68
1,2,3,7,8-PeCDF	11.6	0.402	1	0.03	0.348
2,3,4,7,8-PeCDF	16.2	0.397	1	0.3	4.86
1,2,3,4,7,8-HxCDF	51.2	0.321	1	0.1	5.12
1,2,3,6,7,8-HxCDF	29.8	0.307	1	0.1	2.98
1,2,3,7,8,9-HxCDF	ND	0.411	1	0.1	
2,3,4,6,7,8-HxCDF	35.1	0.351	1	0.1	3.51
1,2,3,4,6,7,8-HpCDF	369	0.561	1	0.01	3.69
1,2,3,4,7,8,9-HpCDF	33.2	0.781	1	0.01	0.332
OCDF	1440	0.217	1	0.0003	0.432

Total TEQ 61.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-04-110409
Lab Code: R0906411-004
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1126
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.339g
Data File Name: P204972
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0201
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	16.8	0.147	1.14	0.78	1.000	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	665.754	67		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	673.339	84		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409	Units:	ng/Kg
Lab Code:	R0906411-005	Basis:	Dry
		Percent Solids:	79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2228
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.669g	Instrument Name:	E-HRMS-03
Data File Name:	P106035	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.711 J	0.132	1.18	0.66	1.001	1
1,2,3,7,8-PeCDD	1.70 J	0.119	2.94	1.49	1.000	1
1,2,3,4,7,8-HxCDD	3.03	0.173	2.94	1.24	0.998	1
1,2,3,6,7,8-HxCDD	8.05	0.157	2.94	1.32	1.000	1
1,2,3,7,8,9-HxCDD	5.92	0.166	2.94	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	257	0.474	2.94	1.03	1.000	1
OCDD	4020 BE	0.572	5.88	0.90	1.000	1
2,3,7,8-TCDF	6.20 C	0.172	1.18	0.79	1.001	1
1,2,3,7,8-PeCDF	2.18 J	0.136	2.94	1.77	1.001	1
2,3,4,7,8-PeCDF	3.03	0.134	2.94	1.64	1.025	1
1,2,3,4,7,8-HxCDF	8.05	0.654	2.94	1.29	1.000	1
1,2,3,6,7,8-HxCDF	4.31	0.625	2.94	1.22	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.838	2.94			1
2,3,4,6,7,8-HxCDF	3.96	0.716	2.94	1.35	1.017	1
1,2,3,4,6,7,8-HpCDF	60.7	0.338	2.94	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	6.47	0.470	2.94	1.18	1.033	1
OCDF	245	0.321	5.88	0.88	1.004	1
Total Tetra-Dioxins	17.2	0.132	1.18	0.79		1
Total Penta-Dioxins	21.5	0.119	2.94	1.56		1
Total Hexa-Dioxins	81.6	0.157	2.94	1.24		1
Total Hepta-Dioxins	620	0.474	2.94	1.05		1
Total Tetra-Furans	43.7	0.172	1.18	0.78		1
Total Penta-Furans	58.3	0.134	2.94	1.55		1
Total Hexa-Furans	84.2	0.625	2.94	1.28		1
Total Hepta-Furans	185	0.338	2.94	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409
Lab Code: R0906411-005
Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.669g
Data File Name: P106035
ICAL Date: 09/11/09
Date Analyzed: 11/13/09 2228
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	731.878	73		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	798.246	80		40-135	1.59	1.177
13C-1,2,3,6,7,8-HxCDD	2500	1757.805	70		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1737.654	70		40-135	1.05	1.068
13C-OCDD	5000	2558.429	51		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	775.682	78		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	847.873	85		40-135	1.63	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1951.970	78		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1736.593	69		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	704.592	88		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409
Lab Code: R0906411-005

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	0.711	0.132	1	1	0.711
1,2,3,7,8-PeCDD	1.70	0.119	1	1	1.70
1,2,3,4,7,8-HxCDD	3.03	0.173	1	0.1	0.303
1,2,3,6,7,8-HxCDD	8.05	0.157	1	0.1	0.805
1,2,3,7,8,9-HxCDD	5.92	0.166	1	0.1	0.592
1,2,3,4,6,7,8-HpCDD	257	0.474	1	0.01	2.57
OCDD	4020	0.572	1	0.0003	1.21
2,3,7,8-TCDF	2.29	0.0986	1	0.1	0.229
1,2,3,7,8-PeCDF	2.18	0.136	1	0.03	0.0654
2,3,4,7,8-PeCDF	3.03	0.134	1	0.3	0.909
1,2,3,4,7,8-HxCDF	8.05	0.654	1	0.1	0.805
1,2,3,6,7,8-HxCDF	4.31	0.625	1	0.1	0.431
1,2,3,7,8,9-HxCDF	ND	0.838	1	0.1	
2,3,4,6,7,8-HxCDF	3.96	0.716	1	0.1	0.396
1,2,3,4,6,7,8-HpCDF	60.7	0.338	1	0.01	0.607
1,2,3,4,7,8,9-HpCDF	6.47	0.470	1	0.01	0.0647
OCDF	245	0.321	1	0.0003	0.0735

Total TEQ 11.5

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-05-110409
Lab Code: R0906411-005
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.669g

Data File Name: P204973
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0238
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.29 K	0.0986	1.18	0.91	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	752.855	75	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	676.612	85	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409-D	Units:	ng/Kg
Lab Code:	R0906411-006	Basis:	Dry
		Percent Solids:	80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2316
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.211g	Instrument Name:	E-HRMS-03
Data File Name:	P106036	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.858 J	0.0915	1.22	0.76	1.001	1
1,2,3,7,8-PeCDD	1.90 J	0.107	3.05	1.66	1.000	1
1,2,3,4,7,8-HxCDD	3.09	0.174	3.05	1.23	0.998	1
1,2,3,6,7,8-HxCDD	10.1	0.158	3.05	1.30	1.000	1
1,2,3,7,8,9-HxCDD	7.62	0.167	3.05	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	302	0.738	3.05	1.05	1.000	1
OCDD	4690 BE	0.370	6.11	0.89	1.000	1
2,3,7,8-TCDF	6.70 C	0.305	1.22	0.75	1.001	1
1,2,3,7,8-PeCDF	2.36 J	0.193	3.05	1.71	1.001	1
2,3,4,7,8-PeCDF	2.72 J	0.191	3.05	1.68	1.025	1
1,2,3,4,7,8-HxCDF	9.01	0.192	3.05	1.25	1.000	1
1,2,3,6,7,8-HxCDF	5.31	0.184	3.05	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.246	3.05			1
2,3,4,6,7,8-HxCDF	6.24	0.210	3.05	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	71.6	0.770	3.05	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	7.29	1.08	3.05	1.05	1.034	1
OCDF	295	0.285	6.11	0.94	1.004	1
Total Tetra-Dioxins	21.2	0.0915	1.22	0.79		1
Total Penta-Dioxins	24.4	0.107	3.05	1.65		1
Total Hexa-Dioxins	97.3	0.158	3.05	1.22		1
Total Hepta-Dioxins	742	0.738	3.05	1.07		1
Total Tetra-Furans	42.4	0.305	1.22	0.70		1
Total Penta-Furans	70.6	0.191	3.05	1.60		1
Total Hexa-Furans	98.4	0.184	3.05	1.26		1
Total Hepta-Furans	222	0.770	3.05	1.03		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1329
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-05-110409-D	Units:	Percent
Lab Code:	R0906411-006	Basis:	Dry
		Percent Solids:	80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/13/09 2316
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.211g	Instrument Name:	E-HRMS-03
Data File Name:	P106036	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	664.301	66		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	679.511	68		40-135	1.57	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1538.376	62		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1412.129	56		40-135	1.07	1.068
13C-OCDD	5000	2048.342	41		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.222	66		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	712.822	71		40-135	1.60	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1700.958	68		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1429.615	57		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	663.233	83		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006
Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	0.858	0.0915	1	1	0.858
1,2,3,7,8-PeCDD	1.90	0.107	1	1	1.90
1,2,3,4,7,8-HxCDD	3.09	0.174	1	0.1	0.309
1,2,3,6,7,8-HxCDD	10.1	0.158	1	0.1	1.01
1,2,3,7,8,9-HxCDD	7.62	0.167	1	0.1	0.762
1,2,3,4,6,7,8-HpCDD	302	0.738	1	0.01	3.02
OCDD	4690	0.370	1	0.0003	1.41
2,3,7,8-TCDF	2.72	0.0581	1	0.1	0.272
1,2,3,7,8-PeCDF	2.36	0.193	1	0.03	0.0708
2,3,4,7,8-PeCDF	2.72	0.191	1	0.3	0.816
1,2,3,4,7,8-HxCDF	9.01	0.192	1	0.1	0.901
1,2,3,6,7,8-HxCDF	5.31	0.184	1	0.1	0.531
1,2,3,7,8,9-HxCDF	ND	0.246	1	0.1	
2,3,4,6,7,8-HxCDF	6.24	0.210	1	0.1	0.624
1,2,3,4,6,7,8-HpCDF	71.6	0.770	1	0.01	0.716
1,2,3,4,7,8,9-HpCDF	7.29	1.08	1	0.01	0.0729
OCDF	295	0.285	1	0.0003	0.0885

Total TEQ

13.4

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-05-110409-D
Lab Code: R0906411-006
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1329
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 80.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.211g

Data File Name: P204974
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0314
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.72	0.0581	1.22	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	653.263	65		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	642.668	80		40-135	NA	0.987

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-06-110409
Lab Code: R0906411-007
Service Request: R0906411
Date Collected: 11/4/09 1350
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.293g
Data File Name: P106037
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0003
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.62	0.104	1.34	0.75	1.001	1
1,2,3,7,8-PeCDD	5.92	0.148	3.35	1.53	1.000	1
1,2,3,4,7,8-HxCDD	10.1	0.245	3.35	1.31	0.998	1
1,2,3,6,7,8-HxCDD	31.5	0.223	3.35	1.34	1.000	1
1,2,3,7,8,9-HxCDD	24.7	0.236	3.35	1.23	1.009	1
1,2,3,4,6,7,8-HpCDD	981 E	0.260	3.35	1.04	1.000	1
OCDD	37700 BE	0.374	6.70	0.90	1.000	1
2,3,7,8-TCDF	21.7 C	0.335	1.34	0.72	1.002	1
1,2,3,7,8-PeCDF	7.90	0.321	3.35	1.70	1.001	1
2,3,4,7,8-PeCDF	8.78	0.317	3.35	1.69	1.025	1
1,2,3,4,7,8-HxCDF	29.4	0.364	3.35	1.27	1.000	1
1,2,3,6,7,8-HxCDF	17.6	0.348	3.35	1.33	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.466	3.35			1
2,3,4,6,7,8-HxCDF	18.4	0.398	3.35	1.31	1.016	1
1,2,3,4,6,7,8-HpCDF	261	0.995	3.35	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	28.0	1.39	3.35	1.11	1.034	1
OCDF	1130	0.231	6.70	0.90	1.004	1
Total Tetra-Dioxins	87.5	0.104	1.34	0.78		1
Total Penta-Dioxins	70.5	0.148	3.35	1.58		1
Total Hexa-Dioxins	368	0.223	3.35	1.27		1
Total Hepta-Dioxins	2910	0.260	3.35	1.04		1
Total Tetra-Furans	77.9	0.335	1.34	0.87		1
Total Penta-Furans	177	0.317	3.35	1.64		1
Total Hexa-Furans	319	0.348	3.35	1.30		1
Total Hepta-Furans	780	0.995	3.35	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1350
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-06-110409	Units:	Percent
Lab Code:	R0906411-007	Basis:	Dry
		Percent Solids:	72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0003
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.293g	Instrument Name:	E-HRMS-03
Data File Name:	P106037	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	707.929	71		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	700.393	70		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1524.466	61		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1443.299	58		40-135	1.07	1.068
13C-OCDD	5000	1992.362	40		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	686.029	69		40-135	0.76	0.979
13C-1,2,3,7,8-PeCDF	1000	738.597	74		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1725.826	69		40-135	0.50	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1449.207	58		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	625.203	78		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-06-110409
Lab Code: R0906411-007

Service Request: R0906411
Date Collected: 11/4/09 1350
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.62	0.104	1	1	2.62
1,2,3,7,8-PeCDD	5.92	0.148	1	1	5.92
1,2,3,4,7,8-HxCDD	10.1	0.245	1	0.1	1.01
1,2,3,6,7,8-HxCDD	31.5	0.223	1	0.1	3.15
1,2,3,7,8,9-HxCDD	24.7	0.236	1	0.1	2.47
1,2,3,4,6,7,8-HpCDD	981	0.260	1	0.01	9.81
OCDD	37700	0.374	1	0.0003	11.3
2,3,7,8-TCDF	8.87	0.0796	1	0.1	0.887
1,2,3,7,8-PeCDF	7.90	0.321	1	0.03	0.237
2,3,4,7,8-PeCDF	8.78	0.317	1	0.3	2.63
1,2,3,4,7,8-HxCDF	29.4	0.364	1	0.1	2.94
1,2,3,6,7,8-HxCDF	17.6	0.348	1	0.1	1.76
1,2,3,7,8,9-HxCDF	ND	0.466	1	0.1	
2,3,4,6,7,8-HxCDF	18.4	0.398	1	0.1	1.84
1,2,3,4,6,7,8-HpCDF	261	0.995	1	0.01	2.61
1,2,3,4,7,8,9-HpCDF	28.0	1.39	1	0.01	0.280
OCDF	1130	0.231	1	0.0003	0.339

Total TEQ 49.8

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1350
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-06-110409	Units:	ng/Kg
Lab Code:	R0906411-007	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0351
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.293g	Instrument Name:	E-HRMS-04
Data File Name:	P204975	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.87	0.0796	1.34	0.78	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	645.521	65	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	627.873	78	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-07-110409
Lab Code: R0906411-008
Service Request: R0906411
Date Collected: 11/4/09 1408
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.331g
Data File Name: P106038
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0051
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.85	0.113	1.23	0.77	1.001	1
1,2,3,7,8-PeCDD	9.89	0.141	3.09	1.60	1.000	1
1,2,3,4,7,8-HxCDD	14.2	0.207	3.09	1.20	0.998	1
1,2,3,6,7,8-HxCDD	50.3	0.188	3.09	1.29	1.000	1
1,2,3,7,8,9-HxCDD	37.2	0.199	3.09	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	1560 E	5.71	3.09	1.06	1.000	1
OCDD	19800 BE	0.941	6.17	0.90	1.000	1
2,3,7,8-TCDF	33.3 C	0.634	1.23	0.78	1.001	1
1,2,3,7,8-PeCDF	14.2	0.404	3.09	1.57	1.000	1
2,3,4,7,8-PeCDF	14.7	0.400	3.09	1.62	1.024	1
1,2,3,4,7,8-HxCDF	59.8	0.245	3.09	1.26	1.000	1
1,2,3,6,7,8-HxCDF	32.6	0.234	3.09	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.314	3.09			1
2,3,4,6,7,8-HxCDF	39.1	0.268	3.09	1.33	1.016	1
1,2,3,4,6,7,8-HpCDF	479	0.426	3.09	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	81.2	0.593	3.09	1.04	1.033	1
OCDF	2700 E	0.311	6.17	0.90	1.004	1
Total Tetra-Dioxins	155	0.113	1.23	0.79		1
Total Penta-Dioxins	127	0.141	3.09	1.52		1
Total Hexa-Dioxins	542	0.188	3.09	1.25		1
Total Hepta-Dioxins	4200	5.71	3.09	1.05		1
Total Tetra-Furans	231	0.634	1.23	0.83		1
Total Penta-Furans	351	0.400	3.09	1.61		1
Total Hexa-Furans	646	0.234	3.09	1.25		1
Total Hepta-Furans	1670	0.426	3.09	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1408
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-07-110409	Units:	Percent
Lab Code:	R0906411-008	Basis:	Dry
		Percent Solids:	78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0051
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.331g	Instrument Name:	E-HRMS-03
Data File Name:	P106038	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	652.580	65		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	669.423	67		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1445.354	58		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1375.081	55		40-135	1.09	1.068
13C-OCDD	5000	1951.854	39	Y	40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	677.548	68		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	720.135	72		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1641.361	66		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1375.348	55		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	639.981	80		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-07-110409
Lab Code: R0906411-008
Service Request: R0906411
Date Collected: 11/4/09 1408
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.85	0.113	1	1	4.85
1,2,3,7,8-PeCDD	9.89	0.141	1	1	9.89
1,2,3,4,7,8-HxCDD	14.2	0.207	1	0.1	1.42
1,2,3,6,7,8-HxCDD	50.3	0.188	1	0.1	5.03
1,2,3,7,8,9-HxCDD	37.2	0.199	1	0.1	3.72
1,2,3,4,6,7,8-HpCDD	1560	5.71	1	0.01	15.6
OCDD	19800	0.941	1	0.0003	5.94
2,3,7,8-TCDF	13.1	0.144	1	0.1	1.31
1,2,3,7,8-PeCDF	14.2	0.404	1	0.03	0.426
2,3,4,7,8-PeCDF	14.7	0.400	1	0.3	4.41
1,2,3,4,7,8-HxCDF	59.8	0.245	1	0.1	5.98
1,2,3,6,7,8-HxCDF	32.6	0.234	1	0.1	3.26
1,2,3,7,8,9-HxCDF	ND	0.314	1	0.1	
2,3,4,6,7,8-HxCDF	39.1	0.268	1	0.1	3.91
1,2,3,4,6,7,8-HpCDF	479	0.426	1	0.01	4.79
1,2,3,4,7,8,9-HpCDF	81.2	0.593	1	0.01	0.812
OCDF	2700	0.311	1	0.0003	0.810

Total TEQ 72.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1408
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-07-110409	Units:	ng/Kg
Lab Code:	R0906411-008	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	78.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0428
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.331g	Instrument Name:	E-HRMS-04
Data File Name:	P204976	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	13.1	0.144	1.23	0.83	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	679.222	68		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	639.735	80		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1429
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-08-110409	Units:	ng/Kg
Lab Code:	R0906411-009	Basis:	Dry
		Percent Solids:	82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0139
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.115g	Instrument Name:	E-HRMS-03
Data File Name:	P106039	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.28	0.0730	1.10	0.79	1.001	1
1,2,3,7,8-PeCDD	7.28	0.0707	2.74	1.53	1.000	1
1,2,3,4,7,8-HxCDD	13.9	0.123	2.74	1.20	0.998	1
1,2,3,6,7,8-HxCDD	35.6	0.112	2.74	1.28	1.000	1
1,2,3,7,8,9-HxCDD	36.2	0.118	2.74	1.33	1.009	1
1,2,3,4,6,7,8-HpCDD	1620 E	4.16	2.74	1.06	1.000	1
OCDD	18700 BE	0.538	5.48	0.90	1.000	1
2,3,7,8-TCDF	15.8 C	0.187	1.10	0.80	1.001	1
1,2,3,7,8-PeCDF	6.12	0.231	2.74	1.58	1.000	1
2,3,4,7,8-PeCDF	8.20	0.229	2.74	1.63	1.024	1
1,2,3,4,7,8-HxCDF	26.8	0.208	2.74	1.30	1.000	1
1,2,3,6,7,8-HxCDF	14.5	0.198	2.74	1.30	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.266	2.74			1
2,3,4,6,7,8-HxCDF	19.6	0.227	2.74	1.29	1.016	1
1,2,3,4,6,7,8-HpCDF	296	0.381	2.74	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	28.5	0.530	2.74	1.02	1.034	1
OCDF	1400 E	0.240	5.48	0.90	1.004	1
Total Tetra-Dioxins	41.2	0.0730	1.10	0.83		1
Total Penta-Dioxins	91.9	0.0707	2.74	1.62		1
Total Hexa-Dioxins	901	0.112	2.74	1.25		1
Total Hepta-Dioxins	7800	4.16	2.74	1.05		1
Total Tetra-Furans	80.4	0.187	1.10	0.75		1
Total Penta-Furans	144	0.229	2.74	1.60		1
Total Hexa-Furans	350	0.198	2.74	1.27		1
Total Hepta-Furans	988	0.381	2.74	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1429
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-08-110409	Units:	Percent
Lab Code:	R0906411-009	Basis:	Dry
		Percent Solids:	82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0139
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.115g	Instrument Name:	E-HRMS-03
Data File Name:	P106039	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	712.863	71		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	733.959	73		40-135	1.59	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1564.475	63		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1527.789	61		40-135	1.05	1.068
13C-OCDD	5000	2161.523	43		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	735.452	74		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	772.858	77		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1841.570	74		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1526.542	61		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	676.660	85		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-08-110409
Lab Code: R0906411-009
Service Request: R0906411
Date Collected: 11/4/09 1429
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.28	0.0730	1	1	2.28
1,2,3,7,8-PeCDD	7.28	0.0707	1	1	7.28
1,2,3,4,7,8-HxCDD	13.9	0.123	1	0.1	1.39
1,2,3,6,7,8-HxCDD	35.6	0.112	1	0.1	3.56
1,2,3,7,8,9-HxCDD	36.2	0.118	1	0.1	3.62
1,2,3,4,6,7,8-HpCDD	1620	4.16	1	0.01	16.2
OCDD	18700	0.538	1	0.0003	5.61
2,3,7,8-TCDF	5.93	0.0970	1	0.1	0.593
1,2,3,7,8-PeCDF	6.12	0.231	1	0.03	0.184
2,3,4,7,8-PeCDF	8.20	0.229	1	0.3	2.46
1,2,3,4,7,8-HxCDF	26.8	0.208	1	0.1	2.68
1,2,3,6,7,8-HxCDF	14.5	0.198	1	0.1	1.45
1,2,3,7,8,9-HxCDF	ND	0.266	1	0.1	
2,3,4,6,7,8-HxCDF	19.6	0.227	1	0.1	1.96
1,2,3,4,6,7,8-HpCDF	296	0.381	1	0.01	2.96
1,2,3,4,7,8,9-HpCDF	28.5	0.530	1	0.01	0.285
OCDF	1400	0.240	1	0.0003	0.420

Total TEQ 52.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-08-110409
Lab Code: R0906411-009
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/4/09 1429
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 82.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.115g

Data File Name: P204977
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 0505
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.93	0.0970	1.10	0.86	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	694.112	69		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	691.140	86		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-09-110409	Units:	ng/Kg
Lab Code:	R0906411-010	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0226
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.343g	Instrument Name:	E-HRMS-03
Data File Name:	P106040	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.129	1.26			1
1,2,3,7,8-PeCDD	1.36 J	0.106	3.15	1.75	1.000	1
1,2,3,4,7,8-HxCDD	2.69 J	0.319	3.15	1.13	0.998	1
1,2,3,6,7,8-HxCDD	7.28	0.290	3.15	1.23	1.000	1
1,2,3,7,8,9-HxCDD	5.83	0.307	3.15	1.37	1.009	1
1,2,3,4,6,7,8-HpCDD	236	1.93	3.15	1.09	1.000	1
OCDD	3660 BE	1.34	6.30	0.89	1.000	1
2,3,7,8-TCDF	3.25 C	0.179	1.26	0.86	1.001	1
1,2,3,7,8-PeCDF	1.75 J	0.136	3.15	1.77	1.000	1
2,3,4,7,8-PeCDF	1.94 J	0.134	3.15	1.46	1.025	1
1,2,3,4,7,8-HxCDF	8.33	0.218	3.15	1.35	1.000	1
1,2,3,6,7,8-HxCDF	3.77	0.208	3.15	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.279	3.15			1
2,3,4,6,7,8-HxCDF	4.37	0.238	3.15	1.16	1.017	1
1,2,3,4,6,7,8-HpCDF	52.8	0.320	3.15	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	4.53	0.445	3.15	1.09	1.034	1
OCDF	205	0.463	6.30	0.91	1.004	1
Total Tetra-Dioxins	6.28	0.129	1.26	0.81		1
Total Penta-Dioxins	10.1	0.106	3.15	1.52		1
Total Hexa-Dioxins	109	0.290	3.15	1.27		1
Total Hepta-Dioxins	878	1.93	3.15	1.07		1
Total Tetra-Furans	13.3	0.179	1.26	0.74		1
Total Penta-Furans	30.8	0.134	3.15	1.67		1
Total Hexa-Furans	64.8	0.208	3.15	1.11		1
Total Hepta-Furans	151	0.320	3.15	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-09-110409	Units:	Percent
Lab Code:	R0906411-010	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0226
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.343g	Instrument Name:	E-HRMS-03
Data File Name:	P106040	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	658.528	66		40-135	0.79	1.010
13C-1,2,3,7,8-PeCDD	1000	705.182	71		40-135	1.51	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1722.926	69		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1432.122	57		40-135	1.06	1.068
13C-OCDD	5000	1676.240	34	Y	40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	671.386	67		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1000	722.348	72		40-135	1.56	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1951.063	78		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1469.202	59		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	630.827	79		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-09-110409
Lab Code: R0906411-010

Service Request: R0906411
Date Collected: 11/4/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.129	1	1	
1,2,3,7,8-PeCDD	1.36	0.106	1	1	1.36
1,2,3,4,7,8-HxCDD	2.69	0.319	1	0.1	0.269
1,2,3,6,7,8-HxCDD	7.28	0.290	1	0.1	0.728
1,2,3,7,8,9-HxCDD	5.83	0.307	1	0.1	0.583
1,2,3,4,6,7,8-HpCDD	236	1.93	1	0.01	2.36
OCDD	3660	1.34	1	0.0003	1.10
2,3,7,8-TCDF	1.45	0.0951	1	0.1	0.145
1,2,3,7,8-PeCDF	1.75	0.136	1	0.03	0.0525
2,3,4,7,8-PeCDF	1.94	0.134	1	0.3	0.582
1,2,3,4,7,8-HxCDF	8.33	0.218	1	0.1	0.833
1,2,3,6,7,8-HxCDF	3.77	0.208	1	0.1	0.377
1,2,3,7,8,9-HxCDF	ND	0.279	1	0.1	
2,3,4,6,7,8-HxCDF	4.37	0.238	1	0.1	0.437
1,2,3,4,6,7,8-HpCDF	52.8	0.320	1	0.01	0.528
1,2,3,4,7,8,9-HpCDF	4.53	0.445	1	0.01	0.0453
OCDF	205	0.463	1	0.0003	0.0615

Total TEQ

9.46

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-09-110409
Lab Code: R0906411-010
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.343g
Data File Name: P204978
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0541
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	1.45	0.0951	1.26	0.88	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	694.770	69	40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	651.622	81	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1620
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-10-110409	Units:	ng/Kg
Lab Code:	R0906411-011	Basis:	Dry
		Percent Solids:	75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0314
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.568g	Instrument Name:	E-HRMS-03
Data File Name:	P106041	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.12	0.0842	1.26	0.82	1.001	1
1,2,3,7,8-PeCDD	8.23	0.135	3.15	1.54	1.000	1
1,2,3,4,7,8-HxCDD	12.6	0.199	3.15	1.29	0.998	1
1,2,3,6,7,8-HxCDD	40.4	0.181	3.15	1.23	1.000	1
1,2,3,7,8,9-HxCDD	28.4	0.192	3.15	1.24	1.008	1
1,2,3,4,6,7,8-HpCDD	1190 E	1.94	3.15	1.05	1.000	1
OCDD	17200 BE	0.710	6.29	0.90	1.000	1
2,3,7,8-TCDF	31.1 C	0.274	1.26	0.77	1.001	1
1,2,3,7,8-PeCDF	9.37	0.185	3.15	1.58	1.001	1
2,3,4,7,8-PeCDF	13.3	0.183	3.15	1.58	1.025	1
1,2,3,4,7,8-HxCDF	35.8	0.241	3.15	1.22	1.000	1
1,2,3,6,7,8-HxCDF	18.4	0.231	3.15	1.29	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.309	3.15			1
2,3,4,6,7,8-HxCDF	15.6	0.264	3.15	1.20	1.017	1
1,2,3,4,6,7,8-HpCDF	306	1.22	3.15	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	30.3	1.70	3.15	1.07	1.034	1
OCDF	1410 E	0.370	6.29	0.91	1.004	1
Total Tetra-Dioxins	148	0.0842	1.26	0.78		1
Total Penta-Dioxins	108	0.135	3.15	1.50		1
Total Hexa-Dioxins	459	0.181	3.15	1.27		1
Total Hepta-Dioxins	3260	1.94	3.15	1.05		1
Total Tetra-Furans	184	0.274	1.26	0.75		1
Total Penta-Furans	217	0.183	3.15	1.61		1
Total Hexa-Furans	395	0.231	3.15	1.28		1
Total Hepta-Furans	995	1.22	3.15	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1620
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-10-110409	Units:	Percent
Lab Code:	R0906411-011	Basis:	Dry
		Percent Solids:	75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 0314
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.568g	Instrument Name:	E-HRMS-03
Data File Name:	P106041	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	685.120	69		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	733.631	73		40-135	1.58	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1468.450	59		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1377.375	55		40-135	1.05	1.068
13C-OCDD	5000	1727.234	35	Y	40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	721.351	72		40-135	0.76	0.979
13C-1,2,3,7,8-PeCDF	1000	785.581	79		40-135	1.57	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1716.705	69		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1384.614	55		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	679.078	85		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-10-110409
Lab Code: R0906411-011
Service Request: R0906411
Date Collected: 11/4/09 1620
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	9.12	0.0842	1	1	9.12
1,2,3,7,8-PeCDD	8.23	0.135	1	1	8.23
1,2,3,4,7,8-HxCDD	12.6	0.199	1	0.1	1.26
1,2,3,6,7,8-HxCDD	40.4	0.181	1	0.1	4.04
1,2,3,7,8,9-HxCDD	28.4	0.192	1	0.1	2.84
1,2,3,4,6,7,8-HpCDD	1190	1.94	1	0.01	11.9
OCDD	17200	0.710	1	0.0003	5.16
2,3,7,8-TCDF	10.5	0.124	1	0.1	1.05
1,2,3,7,8-PeCDF	9.37	0.185	1	0.03	0.281
2,3,4,7,8-PeCDF	13.3	0.183	1	0.3	3.99
1,2,3,4,7,8-HxCDF	35.8	0.241	1	0.1	3.58
1,2,3,6,7,8-HxCDF	18.4	0.231	1	0.1	1.84
1,2,3,7,8,9-HxCDF	ND	0.309	1	0.1	
2,3,4,6,7,8-HxCDF	15.6	0.264	1	0.1	1.56
1,2,3,4,6,7,8-HpCDF	306	1.22	1	0.01	3.06
1,2,3,4,7,8,9-HpCDF	30.3	1.70	1	0.01	0.303
OCDF	1410	0.370	1	0.0003	0.423

Total TEQ 58.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/4/09 1620
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-10-110409	Units:	ng/Kg
Lab Code:	R0906411-011	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	75.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0618
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.568g	Instrument Name:	E-HRMS-04
Data File Name:	P204979	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204967
		Cal Ver. File Name:	P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	10.5	0.124	1.26	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	712.877	71		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	673.379	84		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P106047
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0922
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.77	0.138	1.23	0.66	1.000	1
1,2,3,7,8-PeCDD	8.26	0.165	3.07	1.71	1.000	1
1,2,3,4,7,8-HxCDD	16.5	0.265	3.07	1.30	0.998	1
1,2,3,6,7,8-HxCDD	37.2	0.187	3.07	1.30	1.000	1
1,2,3,7,8,9-HxCDD	32.2	0.234	3.07	1.24	1.009	1
1,2,3,4,6,7,8-HpCDD	1140 E	1.33	3.07	1.04	1.000	1
OCDD	10700 BE	0.261	6.14	0.90	1.000	1
2,3,7,8-TCDF	17.9 C	0.386	1.23	0.79	1.001	1
1,2,3,7,8-PeCDF	6.11	0.302	3.07	1.41	1.000	1
2,3,4,7,8-PeCDF	6.26	0.294	3.07	1.49	1.024	1
1,2,3,4,7,8-HxCDF	31.7	0.564	3.07	1.33	1.000	1
1,2,3,6,7,8-HxCDF	12.7	0.435	3.07	1.18	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.764	3.07			1
2,3,4,6,7,8-HxCDF	18.2	0.555	3.07	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	244	0.597	3.07	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	28.1	0.976	3.07	1.11	1.034	1
OCDF	925	0.137	6.14	0.90	1.004	1
Total Tetra-Dioxins	101	0.138	1.23	0.80		1
Total Penta-Dioxins	147	0.165	3.07	1.49		1
Total Hexa-Dioxins	345	0.187	3.07	1.25		1
Total Hepta-Dioxins	2290	1.33	3.07	1.05		1
Total Tetra-Furans	136	0.386	1.23	0.77		1
Total Penta-Furans	147	0.294	3.07	1.63		1
Total Hexa-Furans	304	0.435	3.07	1.25		1
Total Hepta-Furans	865	0.597	3.07	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P106047
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 0922
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	726.174	73		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	640.323	64		40-135	1.56	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1844.279	74		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1739.246	70		40-135	1.07	1.068
13C-OCDD	5000	3050.152	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	660.366	66		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	755.217	76		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1798.771	72		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1563.207	63		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	683.247	85		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.77	0.138	1	1	2.77
1,2,3,7,8-PeCDD	8.26	0.165	1	1	8.26
1,2,3,4,7,8-HxCDD	16.5	0.265	1	0.1	1.65
1,2,3,6,7,8-HxCDD	37.2	0.187	1	0.1	3.72
1,2,3,7,8,9-HxCDD	32.2	0.234	1	0.1	3.22
1,2,3,4,6,7,8-HpCDD	1140	1.33	1	0.01	11.4
OCDD	10700	0.261	1	0.0003	3.21
2,3,7,8-TCDF	6.21	0.141	1	0.1	0.621
1,2,3,7,8-PeCDF	6.11	0.302	1	0.03	0.183
2,3,4,7,8-PeCDF	6.26	0.294	1	0.3	1.88
1,2,3,4,7,8-HxCDF	31.7	0.564	1	0.1	3.17
1,2,3,6,7,8-HxCDF	12.7	0.435	1	0.1	1.27
1,2,3,7,8,9-HxCDF	ND	0.764	1	0.1	
2,3,4,6,7,8-HxCDF	18.2	0.555	1	0.1	1.82
1,2,3,4,6,7,8-HpCDF	244	0.597	1	0.01	2.44
1,2,3,4,7,8,9-HpCDF	28.1	0.976	1	0.01	0.281
OCDF	925	0.137	1	0.0003	0.278

Total TEQ 46.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-11-110409
Lab Code: R0906411-012
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/4/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 78.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.368g
Data File Name: P204980
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 0655
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204967
Cal Ver. File Name: P204965

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	6.21	0.141	1.23	0.76	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	600.170	60		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	651.734	81		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: R0906411-013
Service Request: R0906411
Date Collected: 11/5/09 1715
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.955g
Data File Name: P106048
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1010
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.00	0.101	1.16	0.75	1.001	1
1,2,3,7,8-PeCDD	10.6	0.152	2.89	1.56	1.000	1
1,2,3,4,7,8-HxCDD	24.3	0.132	2.89	1.23	0.998	1
1,2,3,6,7,8-HxCDD	57.9	0.0928	2.89	1.27	1.000	1
1,2,3,7,8,9-HxCDD	46.0	0.117	2.89	1.17	1.009	1
1,2,3,4,6,7,8-HpCDD	2370 E	0.216	2.89	1.05	1.000	1
OCDD	28700 BE	0.443	5.78	0.90	1.000	1
2,3,7,8-TCDF	29.2 C	0.155	1.16	0.78	1.001	1
1,2,3,7,8-PeCDF	6.91	0.508	2.89	1.73	1.001	1
2,3,4,7,8-PeCDF	8.83	0.496	2.89	1.71	1.025	1
1,2,3,4,7,8-HxCDF	40.4	0.687	2.89	1.23	1.000	1
1,2,3,6,7,8-HxCDF	13.5 K	0.530	2.89	1.47	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.931	2.89			1
2,3,4,6,7,8-HxCDF	25.0	0.676	2.89	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	516	2.42	2.89	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	38.0	3.96	2.89	1.01	1.034	1
OCDF	2210 E	0.171	5.78	0.90	1.004	1
Total Tetra-Dioxins	187	0.101	1.16	0.78		1
Total Penta-Dioxins	110	0.152	2.89	1.45		1
Total Hexa-Dioxins	458	0.0928	2.89	1.26		1
Total Hepta-Dioxins	5030	0.216	2.89	1.04		1
Total Tetra-Furans	179	0.155	1.16	0.84		1
Total Penta-Furans	177	0.496	2.89	1.61		1
Total Hexa-Furans	488	0.530	2.89	1.34		1
Total Hepta-Furans	1900	2.42	2.89	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1715
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-12-110409	Units:	Percent
Lab Code:	R0906411-013	Basis:	Dry
		Percent Solids:	72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1010
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.955g	Instrument Name:	E-HRMS-03
Data File Name:	P106048	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	794.473	79		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	775.789	78		40-135	1.53	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1884.717	75		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1728.732	69		40-135	1.07	1.068
13C-OCDD	5000	2812.176	56		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	725.581	73		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	885.507	89		40-135	1.57	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1910.730	76		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1529.459	61		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	736.716	92		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-12-110409
Lab Code: R0906411-013
Service Request: R0906411
Date Collected: 11/5/09 1715
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.00	0.101	1	1	7.00
1,2,3,7,8-PeCDD	10.6	0.152	1	1	10.6
1,2,3,4,7,8-HxCDD	24.3	0.132	1	0.1	2.43
1,2,3,6,7,8-HxCDD	57.9	0.0928	1	0.1	5.79
1,2,3,7,8,9-HxCDD	46.0	0.117	1	0.1	4.60
1,2,3,4,6,7,8-HpCDD	2370	0.216	1	0.01	23.7
OCDD	28700	0.443	1	0.0003	8.61
2,3,7,8-TCDF	8.92	0.143	1	0.1	0.892
1,2,3,7,8-PeCDF	6.91	0.508	1	0.03	0.207
2,3,4,7,8-PeCDF	8.83	0.496	1	0.3	2.65
1,2,3,4,7,8-HxCDF	40.4	0.687	1	0.1	4.04
1,2,3,6,7,8-HxCDF	13.5	0.530	1	0.1	1.35
1,2,3,7,8,9-HxCDF	ND	0.931	1	0.1	
2,3,4,6,7,8-HxCDF	25.0	0.676	1	0.1	2.50
1,2,3,4,6,7,8-HpCDF	516	2.42	1	0.01	5.16
1,2,3,4,7,8,9-HpCDF	38.0	3.96	1	0.01	0.380
OCDF	2210	0.171	1	0.0003	0.663

Total TEQ 80.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1715
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-12-110409	Units:	ng/Kg
Lab Code:	R0906411-013	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 0951
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.955g	Instrument Name:	E-HRMS-04
Data File Name:	P204984	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204983
		Cal Ver. File Name:	P204981

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.92		0.143	1.16	0.81	1.000	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	710.743	71		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	733.698	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Service Request: R0906411
Date Collected: 11/5/09 0841
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.463g
Data File Name: P106049
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1057
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.28	0.120	1.25	0.79	1.001	1
1,2,3,7,8-PeCDD	7.82	0.106	3.12	1.42	1.000	1
1,2,3,4,7,8-HxCDD	12.7	0.170	3.12	1.25	0.998	1
1,2,3,6,7,8-HxCDD	22.8	0.120	3.12	1.26	1.000	1
1,2,3,7,8,9-HxCDD	21.4	0.151	3.12	1.18	1.008	1
1,2,3,4,6,7,8-HpCDD	722 E	0.782	3.12	1.05	1.000	1
OCDD	6440 BE	0.819	6.25	0.90	1.000	1
2,3,7,8-TCDF	28.4 C	0.252	1.25	0.82	1.001	1
1,2,3,7,8-PeCDF	12.3	0.411	3.12	1.66	1.001	1
2,3,4,7,8-PeCDF	10.9	0.401	3.12	1.58	1.025	1
1,2,3,4,7,8-HxCDF	40.7	0.175	3.12	1.28	1.000	1
1,2,3,6,7,8-HxCDF	19.6	0.135	3.12	1.25	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.237	3.12			1
2,3,4,6,7,8-HxCDF	14.6	0.172	3.12	1.15	1.017	1
1,2,3,4,6,7,8-HpCDF	240	0.563	3.12	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	38.5	0.922	3.12	1.00	1.034	1
OCDF	828	0.277	6.25	0.90	1.004	1
Total Tetra-Dioxins	132	0.120	1.25	0.77		1
Total Penta-Dioxins	118	0.106	3.12	1.61		1
Total Hexa-Dioxins	240	0.120	3.12	1.26		1
Total Hepta-Dioxins	1360	0.782	3.12	1.04		1
Total Tetra-Furans	203	0.252	1.25	0.80		1
Total Penta-Furans	207	0.401	3.12	1.62		1
Total Hexa-Furans	341	0.135	3.12	1.24		1
Total Hepta-Furans	708	0.563	3.12	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0841
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-13-110509	Units:	Percent
Lab Code:	R0906411-014	Basis:	Dry
		Percent Solids:	69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1057
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	11.463g	Instrument Name:	E-HRMS-03
Data File Name:	P106049	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	744.328	74		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	749.152	75		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1623.952	65		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1484.742	59		40-135	1.06	1.068
13C-OCDD	5000	2455.776	49		40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	719.149	72		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	825.440	83		40-135	1.59	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1611.507	64		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1269.154	51		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	721.271	90		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Service Request: R0906411
Date Collected: 11/5/09 0841
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.28	0.120	1	1	2.28
1,2,3,7,8-PeCDD	7.82	0.106	1	1	7.82
1,2,3,4,7,8-HxCDD	12.7	0.170	1	0.1	1.27
1,2,3,6,7,8-HxCDD	22.8	0.120	1	0.1	2.28
1,2,3,7,8,9-HxCDD	21.4	0.151	1	0.1	2.14
1,2,3,4,6,7,8-HpCDD	722	0.782	1	0.01	7.22
OCDD	6440	0.819	1	0.0003	1.93
2,3,7,8-TCDF	10.7	0.148	1	0.1	1.07
1,2,3,7,8-PeCDF	12.3	0.411	1	0.03	0.369
2,3,4,7,8-PeCDF	10.9	0.401	1	0.3	3.27
1,2,3,4,7,8-HxCDF	40.7	0.175	1	0.1	4.07
1,2,3,6,7,8-HxCDF	19.6	0.135	1	0.1	1.96
1,2,3,7,8,9-HxCDF	ND	0.237	1	0.1	
2,3,4,6,7,8-HxCDF	14.6	0.172	1	0.1	1.46
1,2,3,4,6,7,8-HpCDF	240	0.563	1	0.01	2.40
1,2,3,4,7,8,9-HpCDF	38.5	0.922	1	0.01	0.385
OCDF	828	0.277	1	0.0003	0.248

Total TEQ 40.2

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-13-110509
Lab Code: R0906411-014
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0841
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 69.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.463g
Data File Name: P204985
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1027
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	10.7	0.148	1.25	0.77	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	730.408	73		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	700.023	88		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0917
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-14-110509	Units:	ng/Kg
Lab Code:	R0906411-015	Basis:	Dry
		Percent Solids:	77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1145
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.135g	Instrument Name:	E-HRMS-03
Data File Name:	P106050	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.98	0.116	1.28	0.72	1.001	1
1,2,3,7,8-PeCDD	3.44	0.141	3.20	1.77	1.000	1
1,2,3,4,7,8-HxCDD	5.83	0.233	3.20	1.22	0.998	1
1,2,3,6,7,8-HxCDD	19.9	0.164	3.20	1.26	1.000	1
1,2,3,7,8,9-HxCDD	11.9	0.206	3.20	1.24	1.009	1
1,2,3,4,6,7,8-HpCDD	654 E	1.12	3.20	1.02	1.000	1
OCDD	12000 BE	0.322	6.39	0.90	1.000	1
2,3,7,8-TCDF	16.0 C	0.317	1.28	0.74	1.001	1
1,2,3,7,8-PeCDF	3.79	0.467	3.20	1.70	1.001	1
2,3,4,7,8-PeCDF	4.65	0.455	3.20	1.55	1.025	1
1,2,3,4,7,8-HxCDF	19.2	0.388	3.20	1.26	1.000	1
1,2,3,6,7,8-HxCDF	6.36	0.299	3.20	1.36	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.525	3.20			1
2,3,4,6,7,8-HxCDF	11.6	0.381	3.20	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	157	0.893	3.20	1.09	1.000	1
1,2,3,4,7,8,9-HpCDF	15.1	1.47	3.20	1.09	1.034	1
OCDF	404	0.140	6.39	0.90	1.004	1
Total Tetra-Dioxins	25.0	0.116	1.28	0.81		1
Total Penta-Dioxins	42.5	0.141	3.20	1.46		1
Total Hexa-Dioxins	172	0.164	3.20	1.25		1
Total Hepta-Dioxins	1350	1.12	3.20	1.06		1
Total Tetra-Furans	86.7	0.317	1.28	0.87		1
Total Penta-Furans	123	0.455	3.20	1.57		1
Total Hexa-Furans	226	0.299	3.20	1.28		1
Total Hepta-Furans	578	0.893	3.20	1.09		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015
Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.135g
Data File Name: P106050
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1145
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	788.498	79		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	746.257	75		40-135	1.53	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1918.164	77		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1760.357	70		40-135	1.09	1.068
13C-OCDD	5000	3069.418	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	718.077	72		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	815.368	82		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	2042.833	82		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1517.850	61		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	740.266	93		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015

Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.98	0.116	1	1	1.98
1,2,3,7,8-PeCDD	3.44	0.141	1	1	3.44
1,2,3,4,7,8-HxCDD	5.83	0.233	1	0.1	0.583
1,2,3,6,7,8-HxCDD	19.9	0.164	1	0.1	1.99
1,2,3,7,8,9-HxCDD	11.9	0.206	1	0.1	1.19
1,2,3,4,6,7,8-HpCDD	654	1.12	1	0.01	6.54
OCDD	12000	0.322	1	0.0003	3.60
2,3,7,8-TCDF	5.55	0.0739	1	0.1	0.555
1,2,3,7,8-PeCDF	3.79	0.467	1	0.03	0.114
2,3,4,7,8-PeCDF	4.65	0.455	1	0.3	1.40
1,2,3,4,7,8-HxCDF	19.2	2.66	1	0.1	1.92
1,2,3,6,7,8-HxCDF	6.36	2.05	1	0.1	0.636
1,2,3,7,8,9-HxCDF	ND	3.60	1	0.1	
2,3,4,6,7,8-HxCDF	11.6	2.61	1	0.1	1.16
1,2,3,4,6,7,8-HpCDF	157	0.893	1	0.01	1.57
1,2,3,4,7,8,9-HpCDF	15.1	1.47	1	0.01	0.151
OCDF	404	0.140	1	0.0003	0.121

Total TEQ 27.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-14-110509
Lab Code: R0906411-015
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0917
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.135g
Data File Name: P204986
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1104
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.55	0.0739	1.28	0.75	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	758.323	76		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	715.347	89		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-15-110509	Units:	ng/Kg
Lab Code:	R0906411-016	Basis:	Dry
		Percent Solids:	68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1233
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.016g	Instrument Name:	E-HRMS-03
Data File Name:	P106051	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	13.9	0.106	1.46	0.79	1.001	1
1,2,3,7,8-PeCDD	27.6	0.167	3.65	1.65	1.000	1
1,2,3,4,7,8-HxCDD	46.8	0.640	3.65	1.27	0.998	1
1,2,3,6,7,8-HxCDD	104	0.452	3.65	1.29	1.000	1
1,2,3,7,8,9-HxCDD	94.0	0.566	3.65	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	3240 E	2.61	3.65	1.04	1.000	1
OCDD	37000 BE	0.708	7.31	0.90	1.000	1
2,3,7,8-TCDF	158 C	0.419	1.46	0.81	1.001	1
1,2,3,7,8-PeCDF	44.4	1.05	3.65	1.64	1.001	1
2,3,4,7,8-PeCDF	53.9	1.02	3.65	1.58	1.025	1
1,2,3,4,7,8-HxCDF	210	0.685	3.65	1.27	1.000	1
1,2,3,6,7,8-HxCDF	81.6	0.528	3.65	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.928	3.65			1
2,3,4,6,7,8-HxCDF	66.0	0.674	3.65	1.39	1.017	1
1,2,3,4,6,7,8-HpCDF	1200 E	2.45	3.65	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	140	4.01	3.65	1.06	1.033	1
OCDF	3520 E	0.326	7.31	0.92	1.004	1
Total Tetra-Dioxins	358	0.106	1.46	0.77		1
Total Penta-Dioxins	352	0.167	3.65	1.56		1
Total Hexa-Dioxins	964	0.452	3.65	1.28		1
Total Hepta-Dioxins	6520	2.61	3.65	1.03		1
Total Tetra-Furans	995	0.419	1.46	0.79		1
Total Penta-Furans	959	1.02	3.65	1.58		1
Total Hexa-Furans	1280	0.528	3.65	1.26		1
Total Hepta-Furans	3840	2.45	3.65	1.03		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 0958
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-15-110509	Units:	Percent
Lab Code:	R0906411-016	Basis:	Dry
		Percent Solids:	68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1233
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.016g	Instrument Name:	E-HRMS-03
Data File Name:	P106051	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	769.500	77		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1000	771.969	77		40-135	1.55	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1702.299	68		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1660.202	66		40-135	1.04	1.068
13C-OCDD	5000	2581.106	52		40-135	0.86	1.149
13C-2,3,7,8-TCDF	1000	722.449	72		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	859.327	86		40-135	1.56	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1779.506	71		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1419.638	57		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	679.842	85		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: R0906411-016
Service Request: R0906411
Date Collected: 11/5/09 0958
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	13.9	0.106	1	1	13.9
1,2,3,7,8-PeCDD	27.6	0.167	1	1	27.6
1,2,3,4,7,8-HxCDD	46.8	0.640	1	0.1	4.68
1,2,3,6,7,8-HxCDD	104	0.452	1	0.1	10.4
1,2,3,7,8,9-HxCDD	94.0	0.566	1	0.1	9.40
1,2,3,4,6,7,8-HpCDD	3240	2.61	1	0.01	32.4
OCDD	37000	0.708	1	0.0003	11.1
2,3,7,8-TCDF	56.3	0.299	1	0.1	5.63
1,2,3,7,8-PeCDF	44.4	1.05	1	0.03	1.33
2,3,4,7,8-PeCDF	53.9	1.02	1	0.3	16.2
1,2,3,4,7,8-HxCDF	210	8.50	1	0.1	21.0
1,2,3,6,7,8-HxCDF	81.6	6.56	1	0.1	8.16
1,2,3,7,8,9-HxCDF	ND	11.6	1	0.1	
2,3,4,6,7,8-HxCDF	66.0	8.36	1	0.1	6.60
1,2,3,4,6,7,8-HpCDF	1200	2.45	1	0.01	12.0
1,2,3,4,7,8,9-HpCDF	140	4.01	1	0.01	1.40
OCDF	3520	0.326	1	0.0003	1.06

Total TEQ

183

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-15-110509
Lab Code: R0906411-016
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 0958
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 68.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.016g
Data File Name: P204987
ICAL Date: 03/16/09
Date Analyzed: 11/15/09 1141
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	56.3	0.299	1.46	0.79	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	738.468	74		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	675.838	84		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-16-110509
Lab Code: R0906411-017
Service Request: R0906411
Date Collected: 11/5/09 1047
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.325g
Data File Name: P106052
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1320
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	6.73	0.123	1.34	0.79	1.001	1
1,2,3,7,8-PeCDD	11.1	0.150	3.35	1.59	1.000	1
1,2,3,4,7,8-HxCDD	19.0	0.438	3.35	1.18	0.998	1
1,2,3,6,7,8-HxCDD	45.3	0.309	3.35	1.27	1.000	1
1,2,3,7,8,9-HxCDD	36.4	0.387	3.35	1.23	1.009	1
1,2,3,4,6,7,8-HpCDD	1390 E	2.29	3.35	1.05	1.000	1
OCDD	23800 BE	1.10	6.71	0.90	1.000	1
2,3,7,8-TCDF	49.8 C	0.272	1.34	0.77	1.001	1
1,2,3,7,8-PeCDF	13.7	0.354	3.35	1.65	1.001	1
2,3,4,7,8-PeCDF	14.8	0.345	3.35	1.66	1.025	1
1,2,3,4,7,8-HxCDF	57.9	0.685	3.35	1.30	1.000	1
1,2,3,6,7,8-HxCDF	25.6	0.528	3.35	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.927	3.35			1
2,3,4,6,7,8-HxCDF	24.2	0.674	3.35	1.26	1.017	1
1,2,3,4,6,7,8-HpCDF	403	2.30	3.35	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	49.5	3.77	3.35	1.05	1.034	1
OCDF	1460 E	0.295	6.71	0.90	1.004	1
Total Tetra-Dioxins	195	0.123	1.34	0.77		1
Total Penta-Dioxins	140	0.150	3.35	1.56		1
Total Hexa-Dioxins	419	0.309	3.35	1.25		1
Total Hepta-Dioxins	2860	2.29	3.35	1.05		1
Total Tetra-Furans	302	0.272	1.34	0.78		1
Total Penta-Furans	295	0.345	3.35	1.57		1
Total Hexa-Furans	376	0.528	3.35	1.26		1
Total Hepta-Furans	1300	2.30	3.35	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1047
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-16-110509	Units:	Percent
Lab Code:	R0906411-017	Basis:	Dry
		Percent Solids:	72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1320
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.325g	Instrument Name:	E-HRMS-03
Data File Name:	P106052	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	807.261	81		40-135	0.81	1.009
13C-1,2,3,7,8-PeCDD	1000	765.795	77		40-135	1.57	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1786.596	71		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1634.788	65		40-135	1.07	1.068
13C-OCDD	5000	2706.736	54		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	769.616	77		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	855.471	86		40-135	1.58	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1890.027	76		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1449.932	58		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	766.706	96		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-16-110509
Lab Code: R0906411-017
Service Request: R0906411
Date Collected: 11/5/09 1047
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	6.73	0.123	1	1	6.73
1,2,3,7,8-PeCDD	11.1	0.150	1	1	11.1
1,2,3,4,7,8-HxCDD	19.0	0.438	1	0.1	1.90
1,2,3,6,7,8-HxCDD	45.3	0.309	1	0.1	4.53
1,2,3,7,8,9-HxCDD	36.4	0.387	1	0.1	3.64
1,2,3,4,6,7,8-HpCDD	1390	2.29	1	0.01	13.9
OCDD	23800	1.10	1	0.0003	7.14
2,3,7,8-TCDF	15.7	0.200	1	0.1	1.57
1,2,3,7,8-PeCDF	13.7	0.354	1	0.03	0.411
2,3,4,7,8-PeCDF	14.8	0.345	1	0.3	4.44
1,2,3,4,7,8-HxCDF	57.9	0.685	1	0.1	5.79
1,2,3,6,7,8-HxCDF	25.6	0.528	1	0.1	2.56
1,2,3,7,8,9-HxCDF	ND	0.927	1	0.1	
2,3,4,6,7,8-HxCDF	24.2	0.674	1	0.1	2.42
1,2,3,4,6,7,8-HpCDF	403	2.30	1	0.01	4.03
1,2,3,4,7,8,9-HpCDF	49.5	3.77	1	0.01	0.495
OCDF	1460	0.295	1	0.0003	0.438

Total TEQ 71.1

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1047
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-16-110509	Units:	ng/Kg
Lab Code:	R0906411-017	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	72.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/15/09 1218
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.325g	Instrument Name:	E-HRMS-04
Data File Name:	P204988	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P204983
		Cal Ver. File Name:	P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	15.7	0.200	1.34	0.79	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	801.495	80		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	734.536	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g
Data File Name: P106053
ICAL Date: 09/11/09
Date Analyzed: 11/14/09 1408
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106043

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	20.1	0.132	1.34	0.78	1.001	1
1,2,3,7,8-PeCDD	35.5	0.199	3.34	1.59	1.000	1
1,2,3,4,7,8-HxCDD	51.1 K	0.152	3.34	1.52	0.998	1
1,2,3,6,7,8-HxCDD	163	0.107	3.34	1.22	1.000	1
1,2,3,7,8,9-HxCDD	139	0.134	3.34	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	5260 E	10.4	3.34	1.05	1.000	1
OCDD	71500 BE	0.678	6.68	0.90	1.000	1
2,3,7,8-TCDF	99.9 C	0.300	1.34	0.77	1.002	1
1,2,3,7,8-PeCDF	22.7	0.689	3.34	1.64	1.001	1
2,3,4,7,8-PeCDF	30.4	0.672	3.34	1.60	1.024	1
1,2,3,4,7,8-HxCDF	144	1.06	3.34	1.25	1.000	1
1,2,3,6,7,8-HxCDF	58.1	0.816	3.34	1.26	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.44	3.34			1
2,3,4,6,7,8-HxCDF	40.1	1.05	3.34	1.19	1.017	1
1,2,3,4,6,7,8-HpCDF	1690 E	6.06	3.34	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	156	9.91	3.34	1.08	1.034	1
OCDF	10200 E	0.251	6.68	0.90	1.004	1
Total Tetra-Dioxins	459	0.132	1.34	0.79		1
Total Penta-Dioxins	390	0.199	3.34	1.50		1
Total Hexa-Dioxins	1270	0.107	3.34	1.22		1
Total Hepta-Dioxins	10800	10.4	3.34	1.04		1
Total Tetra-Furans	674	0.300	1.34	0.78		1
Total Penta-Furans	533	0.672	3.34	1.61		1
Total Hexa-Furans	1550	0.816	3.34	1.25		1
Total Hepta-Furans	6940	6.06	3.34	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1210
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-17-110509	Units:	Percent
Lab Code:	R0906411-018	Basis:	Dry
		Percent Solids:	74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/14/09 1408
Prep Method:	Method	Date Extracted:	11/10/09
Sample Amount:	10.071g	Instrument Name:	E-HRMS-03
Data File Name:	P106053	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106031
		Cal Ver. File Name:	P106043

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	746.217	75		40-135	0.83	1.010
13C-1,2,3,7,8-PeCDD	1000	743.863	74		40-135	1.54	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1859.932	74		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1785.696	71		40-135	1.08	1.068
13C-OCDD	5000	3042.635	61		40-135	0.88	1.148
13C-2,3,7,8-TCDF	1000	690.894	69		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	809.130	81		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1943.475	78		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1574.935	63		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	698.771	87		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	20.1	0.132	1	1	20.1
1,2,3,7,8-PeCDD	35.5	0.199	1	1	35.5
1,2,3,4,7,8-HxCDD	51.1	0.152	1	0.1	5.11
1,2,3,6,7,8-HxCDD	163	0.107	1	0.1	16.3
1,2,3,7,8,9-HxCDD	139	0.134	1	0.1	13.9
1,2,3,4,6,7,8-HpCDD	5610	6.77	10	0.01	56.1
OCDD	41800	3.20	10	0.0003	12.5
2,3,7,8-TCDF	33.1	0.336	1	0.1	3.31
1,2,3,7,8-PeCDF	22.7	0.689	1	0.03	0.681
2,3,4,7,8-PeCDF	30.4	0.672	1	0.3	9.12
1,2,3,4,7,8-HxCDF	144	1.06	1	0.1	14.4
1,2,3,6,7,8-HxCDF	58.1	0.816	1	0.1	5.81
1,2,3,7,8,9-HxCDF	ND	1.44	1	0.1	
2,3,4,6,7,8-HxCDF	40.1	1.05	1	0.1	4.01
1,2,3,4,6,7,8-HpCDF	2260	7.25	10	0.01	22.6
1,2,3,4,7,8,9-HpCDF	156	9.91	1	0.01	1.56
OCDF	10500	2.92	10	0.0003	3.15

Total TEQ

224

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P106295
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1906
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	27.0 K	1.50	13.4	0.96	1.001	10
1,2,3,7,8-PeCDD	53.4	1.49	33.4	1.45	1.000	10
1,2,3,4,7,8-HxCDD	70.3	25.0	33.4	1.36	0.998	10
1,2,3,6,7,8-HxCDD	228	22.7	33.4	1.29	1.000	10
1,2,3,7,8,9-HxCDD	174	24.0	33.4	1.19	1.008	10
1,2,3,4,6,7,8-HpCDD	5610	6.77	33.4	1.04	1.000	10
OCDD	41800 BE	3.20	66.8	0.90	1.000	10
2,3,7,8-TCDF	134 C	2.33	13.4	0.79	1.001	10
1,2,3,7,8-PeCDF	37.9	1.99	33.4	1.54	1.000	10
2,3,4,7,8-PeCDF	47.4	1.97	33.4	1.73	1.024	10
1,2,3,4,7,8-HxCDF	185	12.8	33.4	1.21	1.000	10
1,2,3,6,7,8-HxCDF	85.6	12.2	33.4	1.27	1.003	10
1,2,3,7,8,9-HxCDF	ND U	16.3	33.4			10
2,3,4,6,7,8-HxCDF	59.3	13.9	33.4	1.23	1.017	10
1,2,3,4,6,7,8-HpCDF	2260	7.25	33.4	1.05	1.000	10
1,2,3,4,7,8,9-HpCDF	260	10.1	33.4	1.07	1.034	10
OCDF	10500	2.92	66.8	0.90	1.004	10

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P106295
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1906
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1330	990.936	74		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1350	1131.402	84		40-135	1.60	1.179
13C-1,2,3,6,7,8-HxCDD	3380	2438.966	72		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	3520	2662.789	76		40-135	1.06	1.068
13C-OCDD	8200	4826.890	59		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1450	1054.898	73		40-135	0.74	0.978
13C-1,2,3,7,8-PeCDF	1230	1162.671	94		40-135	1.61	1.139
13C-1,2,3,4,7,8-HxCDF	3210	2373.822	74		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	3970	2739.278	69		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	86.208	108		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-17-110509
Lab Code: R0906411-018
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/5/09 1210
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 74.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.071g

Data File Name: P204989
ICAL Date: 03/16/09

Date Analyzed: 11/15/09 1254
Date Extracted: 11/10/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P204983
Cal Ver. File Name: P204981

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	33.1	0.336	1.34	0.76	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	610.550	61		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	685.538	86		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1308
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-18-110509	Units:	ng/Kg
Lab Code:	R0906411-019	Basis:	Dry
		Percent Solids:	74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2010
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.385g	Instrument Name:	E-HRMS-03
Data File Name:	P106067	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	10.9	0.124	1.29	0.80	1.001	1
1,2,3,7,8-PeCDD	28.7	0.276	3.23	1.66	1.000	1
1,2,3,4,7,8-HxCDD	59.7	1.08	3.23	1.28	0.998	1
1,2,3,6,7,8-HxCDD	234	0.972	3.23	1.26	1.000	1
1,2,3,7,8,9-HxCDD	131	1.03	3.23	1.26	1.009	1
1,2,3,4,6,7,8-HpCDD	7740 BE	14.2	3.23	1.05	1.000	1
OCDD	82700 BE	0.565	6.45	0.90	1.000	1
2,3,7,8-TCDF	64.0 C	1.02	1.29	0.77	1.001	1
1,2,3,7,8-PeCDF	21.9 P	0.736	3.23	1.74	1.001	1
2,3,4,7,8-PeCDF	24.6	0.728	3.23	1.76	1.025	1
1,2,3,4,7,8-HxCDF	147	1.13	3.23	1.23	1.000	1
1,2,3,6,7,8-HxCDF	69.0	1.08	3.23	1.20	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.44	3.23			1
2,3,4,6,7,8-HxCDF	47.8	1.23	3.23	1.18	1.017	1
1,2,3,4,6,7,8-HpCDF	2600 BE	9.83	3.23	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	190	13.7	3.23	1.05	1.034	1
OCDF	20000 BE	0.201	6.45	0.90	1.004	1
Total Tetra-Dioxins	228	0.124	1.29	0.77		1
Total Penta-Dioxins	200	0.276	3.23	1.39		1
Total Hexa-Dioxins	1650	0.972	3.23	1.24		1
Total Hepta-Dioxins	15300	14.2	3.23	1.05		1
Total Tetra-Furans	422	1.02	1.29	0.77		1
Total Penta-Furans	540	0.728	3.23	1.60		1
Total Hexa-Furans	1230	1.08	3.23	1.24		1
Total Hepta-Furans	11500	9.83	3.23	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1308
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-18-110509	Units:	Percent
Lab Code:	R0906411-019	Basis:	Dry
		Percent Solids:	74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2010
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.385g	Instrument Name:	E-HRMS-03
Data File Name:	P106067	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	618.762	62		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	641.411	64		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1483.778	59		40-135	1.23	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1449.791	58		40-135	1.08	1.068
13C-OCDD	5000	2066.829	41		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	610.372	61		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	694.147	69		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1532.912	61		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1427.442	57		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	584.822	73		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	10.9	0.124	1	1	10.9
1,2,3,7,8-PeCDD	28.7	0.276	1	1	28.7
1,2,3,4,7,8-HxCDD	59.7	1.08	1	0.1	5.97
1,2,3,6,7,8-HxCDD	234	0.972	1	0.1	23.4
1,2,3,7,8,9-HxCDD	131	1.03	1	0.1	13.1
1,2,3,4,6,7,8-HpCDD	8840	18.4	50	0.01	88.4
OCDD	86400	6.81	50	0.0003	25.9
2,3,7,8-TCDF	21.2	0.260	1	0.1	2.12
1,2,3,7,8-PeCDF	21.9	0.736	1	0.03	0.657
2,3,4,7,8-PeCDF	24.6	0.728	1	0.3	7.38
1,2,3,4,7,8-HxCDF	147	1.13	1	0.1	14.7
1,2,3,6,7,8-HxCDF	69.0	1.08	1	0.1	6.90
1,2,3,7,8,9-HxCDF	ND	1.44	1	0.1	
2,3,4,6,7,8-HxCDF	47.8	1.23	1	0.1	4.78
1,2,3,4,6,7,8-HpCDF	3290	9.96	50	0.01	32.9
1,2,3,4,7,8,9-HpCDF	190	13.7	1	0.01	1.90
OCDF	23100	3.88	50	0.0003	6.93

Total TEQ 275

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g

Data File Name: P205249
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 1536
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	5.27	64.5			50
1,2,3,7,8-PeCDD	41.8 J	3.04	161	1.37	1.001	50
1,2,3,4,7,8-HxCDD	75.5 J	7.61	161	1.20	0.999	50
1,2,3,6,7,8-HxCDD	300 K	6.74	161	1.44	1.000	50
1,2,3,7,8,9-HxCDD	201	7.33	161	1.36	1.009	50
1,2,3,4,6,7,8-HpCDD	8840 B	18.4	161	1.02	1.000	50
OCDD	86400 B	6.81	323	0.90	1.000	50
2,3,7,8-TCDF	84.5 CK	9.97	64.5	0.93	1.001	50
1,2,3,7,8-PeCDF	20.6 J	7.00	161	1.36	1.000	50
2,3,4,7,8-PeCDF	27.2 JK	6.93	161	1.83	1.024	50
1,2,3,4,7,8-HxCDF	206	28.2	161	1.12	1.000	50
1,2,3,6,7,8-HxCDF	91.9 JK	27.1	161	1.04	1.004	50
1,2,3,7,8,9-HxCDF	ND U	35.3	161			50
2,3,4,6,7,8-HxCDF	47.2 JK	30.3	161	1.55	1.017	50
1,2,3,4,6,7,8-HpCDF	3290 B	9.96	161	1.04	1.000	50
1,2,3,4,7,8,9-HpCDF	240	13.6	161	0.92	1.034	50
OCDF	23100 B	3.88	323	0.90	1.004	50

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g

Data File Name: P205249
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 1536
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1610	872.174	54		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1560	1004.524	64		40-135	1.54	1.175
13C-1,2,3,6,7,8-HxCDD	4240	2365.220	56		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	4310	2989.156	69		40-135	1.06	1.068
13C-OCDD	12200	5591.298	46		40-135	0.88	1.147
13C-2,3,7,8-TCDF	1640	787.582	48		40-135	0.76	0.980
13C-1,2,3,7,8-PeCDF	1450	945.580	65		40-135	1.54	1.136
13C-1,2,3,4,7,8-HxCDF	4100	2260.617	55		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	4390	2725.815	62		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	11.246	70		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-18-110509
Lab Code: R0906411-019
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.6

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.385g
Data File Name: P205014
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1110
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	21.2	0.260	1.29	0.80	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	760.877	76		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	744.572	93		40-135	NA	0.988

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.724g
Data File Name: P106068
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2058
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.49	0.109	1.25	0.78	1.001	1
1,2,3,7,8-PeCDD	5.74	0.146	3.13	1.60	1.000	1
1,2,3,4,7,8-HxCDD	11.2	0.257	3.13	1.27	0.998	1
1,2,3,6,7,8-HxCDD	46.2	0.233	3.13	1.23	1.000	1
1,2,3,7,8,9-HxCDD	27.5	0.247	3.13	1.22	1.009	1
1,2,3,4,6,7,8-HpCDD	1730 BE	1.52	3.13	1.04	1.000	1
OCDD	22100 BE	1.48	6.27	0.90	1.000	1
2,3,7,8-TCDF	45.4 C	0.178	1.25	0.79	1.001	1
1,2,3,7,8-PeCDF	5.87	0.193	3.13	1.57	1.000	1
2,3,4,7,8-PeCDF	14.8	0.191	3.13	1.53	1.025	1
1,2,3,4,7,8-HxCDF	35.0	0.628	3.13	1.24	1.000	1
1,2,3,6,7,8-HxCDF	10.7	0.599	3.13	1.37	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.804	3.13			1
2,3,4,6,7,8-HxCDF	14.7	0.686	3.13	1.21	1.017	1
1,2,3,4,6,7,8-HpCDF	508 B	2.87	3.13	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	27.3	3.99	3.13	1.07	1.034	1
OCDF	3790 BE	0.547	6.27	0.90	1.004	1
Total Tetra-Dioxins	155	0.109	1.25	0.78		1
Total Penta-Dioxins	67.2	0.146	3.13	1.43		1
Total Hexa-Dioxins	335	0.233	3.13	1.26		1
Total Hepta-Dioxins	3600	1.52	3.13	1.06		1
Total Tetra-Furans	195	0.178	1.25	0.76		1
Total Penta-Furans	220	0.191	3.13	1.62		1
Total Hexa-Furans	245	0.599	3.13	1.27		1
Total Hepta-Furans	2160	2.87	3.13	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1440
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-19-110509	Units:	Percent
Lab Code:	R0906411-020	Basis:	Dry
		Percent Solids:	74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2058
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.724g	Instrument Name:	E-HRMS-03
Data File Name:	P106068	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	665.164	67		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	675.975	68		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1332.726	53		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1218.981	49		40-135	1.06	1.069
13C-OCDD	5000	1836.663	37	Y	40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	715.076	72		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	662.425	66		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1406.791	56		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1187.958	48		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	601.269	75		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.49	0.109	1	1	2.49
1,2,3,7,8-PeCDD	5.74	0.146	1	1	5.74
1,2,3,4,7,8-HxCDD	11.2	0.257	1	0.1	1.12
1,2,3,6,7,8-HxCDD	46.2	0.233	1	0.1	4.62
1,2,3,7,8,9-HxCDD	27.5	0.247	1	0.1	2.75
1,2,3,4,6,7,8-HpCDD	1730	1.52	1	0.01	17.3
OCDD	22100	1.48	1	0.0003	6.63
2,3,7,8-TCDF	8.45	0.0998	1	0.1	0.845
1,2,3,7,8-PeCDF	5.87	0.193	1	0.03	0.176
2,3,4,7,8-PeCDF	14.8	0.191	1	0.3	4.44
1,2,3,4,7,8-HxCDF	35.0	0.628	1	0.1	3.50
1,2,3,6,7,8-HxCDF	10.7	0.599	1	0.1	1.07
1,2,3,7,8,9-HxCDF	ND	0.804	1	0.1	
2,3,4,6,7,8-HxCDF	14.7	0.686	1	0.1	1.47
1,2,3,4,6,7,8-HpCDF	508	2.87	1	0.01	5.08
1,2,3,4,7,8,9-HpCDF	27.3	3.99	1	0.01	0.273
OCDF	3790	0.547	1	0.0003	1.14

Total TEQ 58.6

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-19-110509
Lab Code: R0906411-020
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1440
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.724g
Data File Name: P205015
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1147
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.45	0.0998	1.25	0.84	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	846.240	85	40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	694.645	87	40-135	NA	0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P106069
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2145
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.33	0.108	1.23	0.81	1.001	1
1,2,3,7,8-PeCDD	8.59	0.190	3.07	1.50	1.000	1
1,2,3,4,7,8-HxCDD	17.6	0.405	3.07	1.29	0.998	1
1,2,3,6,7,8-HxCDD	95.8	0.367	3.07	1.27	1.000	1
1,2,3,7,8,9-HxCDD	47.1	0.388	3.07	1.27	1.009	1
1,2,3,4,6,7,8-HpCDD	3850 BE	4.47	3.07	1.05	1.000	1
OCDD	49200 BE	0.914	6.15	0.90	1.000	1
2,3,7,8-TCDF	20.5 C	0.209	1.23	0.76	1.001	1
1,2,3,7,8-PeCDF	5.37	0.285	3.07	1.63	1.000	1
2,3,4,7,8-PeCDF	8.02	0.282	3.07	1.53	1.025	1
1,2,3,4,7,8-HxCDF	46.2	0.853	3.07	1.25	1.000	1
1,2,3,6,7,8-HxCDF	13.0	0.815	3.07	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.10	3.07			1
2,3,4,6,7,8-HxCDF	13.9	0.933	3.07	1.29	1.017	1
1,2,3,4,6,7,8-HpCDF	935 BE	1.99	3.07	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	57.7	2.76	3.07	1.06	1.034	1
OCDF	8500 BE	0.340	6.15	0.89	1.004	1
Total Tetra-Dioxins	832	0.108	1.23	0.79		1
Total Penta-Dioxins	114	0.190	3.07	1.45		1
Total Hexa-Dioxins	622	0.367	3.07	1.27		1
Total Hepta-Dioxins	7990	4.47	3.07	1.05		1
Total Tetra-Furans	99.8	0.209	1.23	0.79		1
Total Penta-Furans	212	0.282	3.07	1.60		1
Total Hexa-Furans	876	0.815	3.07	1.24		1
Total Hepta-Furans	4420	1.99	3.07	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P106069
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2145
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	672.476	67		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1000	714.743	71		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1748.388	70		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1682.112	67		40-135	1.06	1.069
13C-OCDD	5000	2323.082	46		40-135	0.89	1.148
13C-2,3,7,8-TCDF	1000	663.814	66		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	738.581	74		40-135	1.62	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1846.411	74		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1652.431	66		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	641.410	80		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.33	0.108	1	1	4.33
1,2,3,7,8-PeCDD	8.59	0.190	1	1	8.59
1,2,3,4,7,8-HxCDD	17.6	0.405	1	0.1	1.76
1,2,3,6,7,8-HxCDD	95.8	0.367	1	0.1	9.58
1,2,3,7,8,9-HxCDD	47.1	0.388	1	0.1	4.71
1,2,3,4,6,7,8-HpCDD	2730	3.83	20	0.01	27.3
OCDD	39700	3.51	20	0.0003	11.9
2,3,7,8-TCDF	5.16	0.0978	1	0.1	0.516
1,2,3,7,8-PeCDF	5.37	0.285	1	0.03	0.161
2,3,4,7,8-PeCDF	8.02	0.282	1	0.3	2.41
1,2,3,4,7,8-HxCDF	46.2	0.853	1	0.1	4.62
1,2,3,6,7,8-HxCDF	13.0	0.815	1	0.1	1.30
1,2,3,7,8,9-HxCDF	ND	1.10	1	0.1	
2,3,4,6,7,8-HxCDF	13.9	0.933	1	0.1	1.39
1,2,3,4,6,7,8-HpCDF	707	2.65	20	0.01	7.07
1,2,3,4,7,8,9-HpCDF	57.7	2.76	1	0.01	0.577
OCDF	5970	2.58	20	0.0003	1.79

Total TEQ 88.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1510
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-20-110509	Units:	ng/Kg
Lab Code:	R0906411-021	Basis:	Dry
Run Type:	Dilution	Percent Solids:	76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/4/09 1927
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.633g	Instrument Name:	E-HRMS-04
Data File Name:	P205253	GC Column:	DB-5
ICAL Date:	08/01/08	Blank File Name:	P106058
		Cal Ver. File Name:	P205250

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.841	24.6			20
1,2,3,7,8-PeCDD	15.4 JK	0.707	61.5	1.19	1.000	20
1,2,3,4,7,8-HxCDD	16.3 J	3.24	61.5	1.37	0.998	20
1,2,3,6,7,8-HxCDD	87.1	2.87	61.5	1.28	1.000	20
1,2,3,7,8,9-HxCDD	67.0	3.13	61.5	1.18	1.009	20
1,2,3,4,6,7,8-HpCDD	2730 B	3.83	61.5	1.06	1.000	20
OCDD	39700 B	3.51	123	0.90	1.000	20
2,3,7,8-TCDF	ND U	2.29	24.6			20
1,2,3,7,8-PeCDF	6.14 J	2.25	61.5	1.60	1.001	20
2,3,4,7,8-PeCDF	8.82 JK	2.22	61.5	1.25	1.025	20
1,2,3,4,7,8-HxCDF	45.3 J	2.45	61.5	1.22	1.000	20
1,2,3,6,7,8-HxCDF	16.2 J	2.35	61.5	1.25	1.003	20
1,2,3,7,8,9-HxCDF	ND U	3.06	61.5			20
2,3,4,6,7,8-HxCDF	15.7 J	2.62	61.5	1.16	1.017	20
1,2,3,4,6,7,8-HpCDF	707 B	2.65	61.5	0.99	1.000	20
1,2,3,4,7,8,9-HpCDF	36.6 J	3.61	61.5	1.00	1.033	20
OCDF	5970 B	2.58	123	0.90	1.004	20

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g

Data File Name: P205253
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 1927
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1490	973.676	65		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1410	1100.456	78		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	3570	2458.320	69		40-135	1.21	0.992
13C-1,2,3,4,6,7,8-HpCDD	3730	2812.910	75		40-135	1.03	1.068
13C-OCDD	10900	4967.775	46		40-135	0.88	1.146
13C-2,3,7,8-TCDF	1520	909.310	60		40-135	0.74	0.979
13C-1,2,3,7,8-PeCDF	1350	1039.678	77		40-135	1.54	1.136
13C-1,2,3,4,7,8-HxCDF	3380	2418.205	72		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	3790	2480.927	65		40-135	0.42	1.044
37Cl-2,3,7,8-TCDD	800	22.979	57		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-20-110509
Lab Code: R0906411-021
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1510
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.633g
Data File Name: P205016
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1223
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	5.16	0.0978	1.23	0.77	1.000	1	
Labeled Compounds		Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio
13C-2,3,7,8-TCDF		1000	696.998	70		40-135	0.76
37Cl-2,3,7,8-TCDD		800	673.110	84		40-135	NA
							0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g
Data File Name: P106070
ICAL Date: 09/11/09
Date Analyzed: 11/16/09 2233
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	22.0	0.123	1.23	0.76	1.000	1
1,2,3,7,8-PeCDD	48.5	0.182	3.08	1.60	1.000	1
1,2,3,4,7,8-HxCDD	118	1.02	3.08	1.26	0.998	1
1,2,3,6,7,8-HxCDD	385	0.920	3.08	1.25	1.000	1
1,2,3,7,8,9-HxCDD	257	0.974	3.08	1.17	1.009	1
1,2,3,4,6,7,8-HpCDD	14000 BE	10.5	3.08	1.04	1.000	1
OCDD	134000 BE	1.22	6.16	0.92	1.000	1
2,3,7,8-TCDF	53.8 C	0.941	1.23	0.75	1.001	1
1,2,3,7,8-PeCDF	26.9 KP	0.441	3.08	2.02	1.001	1
2,3,4,7,8-PeCDF	31.3	0.436	3.08	1.56	1.025	1
1,2,3,4,7,8-HxCDF	199	1.33	3.08	1.33	1.000	1
1,2,3,6,7,8-HxCDF	83.4 K	1.27	3.08	1.45	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.70	3.08			1
2,3,4,6,7,8-HxCDF	124	1.45	3.08	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	4730 BE	5.66	3.08	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	293	7.87	3.08	1.07	1.034	1
OCDF	40800 BE	0.387	6.16	0.90	1.004	1
Total Tetra-Dioxins	338	0.123	1.23	0.78		1
Total Penta-Dioxins	504	0.182	3.08	1.46		1
Total Hexa-Dioxins	2890	0.920	3.08	1.26		1
Total Hepta-Dioxins	28200	10.5	3.08	1.05		1
Total Tetra-Furans	341	0.941	1.23	0.88		1
Total Penta-Furans	723	0.436	3.08	1.57		1
Total Hexa-Furans	1990	1.27	3.08	1.29		1
Total Hepta-Furans	19500	5.66	3.08	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1540
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-21-110509	Units:	Percent
Lab Code:	R0906411-022	Basis:	Dry
		Percent Solids:	76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/16/09 2233
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.628g	Instrument Name:	E-HRMS-03
Data File Name:	P106070	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	656.193	66		40-135	0.76	1.010
13C-1,2,3,7,8-PeCDD	1000	676.854	68		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1482.323	59		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1481.106	59		40-135	1.08	1.068
13C-OCDD	5000	2085.304	42		40-135	0.91	1.148
13C-2,3,7,8-TCDF	1000	658.268	66		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	684.414	68		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1566.642	63		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1464.755	59		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	626.379	78		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	22.0	0.123	1	1	22.0
1,2,3,7,8-PeCDD	48.5	0.182	1	1	48.5
1,2,3,4,7,8-HxCDD	118	1.02	1	0.1	11.8
1,2,3,6,7,8-HxCDD	385	0.920	1	0.1	38.5
1,2,3,7,8,9-HxCDD	257	0.974	1	0.1	25.7
1,2,3,4,6,7,8-HpCDD	16500	16.7	100	0.01	165
OCDD	153000	15.2	100	0.0003	45.9
2,3,7,8-TCDF	19.5	0.186	1	0.1	1.95
1,2,3,7,8-PeCDF	26.9	0.441	1	0.03	0.807
2,3,4,7,8-PeCDF	31.3	0.436	1	0.3	9.39
1,2,3,4,7,8-HxCDF	199	1.33	1	0.1	19.9
1,2,3,6,7,8-HxCDF	83.4	1.27	1	0.1	8.34
1,2,3,7,8,9-HxCDF	ND	1.70	1	0.1	
2,3,4,6,7,8-HxCDF	124	1.45	1	0.1	12.4
1,2,3,4,6,7,8-HpCDF	6060	29.4	100	0.01	60.6
1,2,3,4,7,8,9-HpCDF	293	7.87	1	0.01	2.93
OCDF	42100	8.68	100	0.0003	12.6

Total TEQ 486

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205254
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 2014
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	26.6 JK	7.36	123	0.98	1.001	100
1,2,3,7,8-PeCDD	69.5 JK	4.88	308	1.18	1.000	100
1,2,3,4,7,8-HxCDD	159 J	8.46	308	1.22	0.998	100
1,2,3,6,7,8-HxCDD	652	7.50	308	1.15	1.000	100
1,2,3,7,8,9-HxCDD	533	8.17	308	1.39	1.008	100
1,2,3,4,6,7,8-HpCDD	16500 B	16.7	308	1.00	1.000	100
OCDD	153000 B	15.2	616	0.89	1.000	100
2,3,7,8-TCDF	29.2 CJ	13.0	123	0.67	1.002	100
1,2,3,7,8-PeCDF	59.3 J	9.68	308	1.49	1.001	100
2,3,4,7,8-PeCDF	38.4 J	9.59	308	1.33	1.024	100
1,2,3,4,7,8-HxCDF	271 J	55.1	308	1.24	1.000	100
1,2,3,6,7,8-HxCDF	183 J	52.9	308	1.29	1.003	100
1,2,3,7,8,9-HxCDF	ND U	68.9	308			100
2,3,4,6,7,8-HxCDF	117 JK	59.1	308	1.64	1.017	100
1,2,3,4,6,7,8-HpCDF	6060 B	29.4	308	1.06	1.000	100
1,2,3,4,7,8,9-HpCDF	307 J	40.1	308	0.94	1.033	100
OCDF	42100 B	8.68	616	0.88	1.004	100

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205254
ICAL Date: 08/01/08

Date Analyzed: 12/4/09 2014
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205250

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1520	919.633	61		40-135	0.77	1.010
13C-1,2,3,7,8-PeCDD	1470	1087.316	74		40-135	1.55	1.176
13C-1,2,3,6,7,8-HxCDD	4240	2533.830	60		40-135	1.21	0.992
13C-1,2,3,4,6,7,8-HpCDD	4240	2889.168	68		40-135	1.04	1.068
13C-OCDD	11900	5031.631	42		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1520	880.190	58		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1470	1020.260	69		40-135	1.52	1.136
13C-1,2,3,4,7,8-HxCDF	3970	2448.075	62		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	4240	2712.893	64		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	6.436	80		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-21-110509
Lab Code: R0906411-022
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/5/09 1540
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 76.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.628g

Data File Name: P205017
ICAL Date: 03/16/09

Date Analyzed: 11/17/09 1300
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	19.5	0.186	1.23	0.69	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	659.192	66		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	636.226	80		40-135	NA	0.987

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.520g
Data File Name: P205248
ICAL Date: 08/01/08
Date Analyzed: 12/4/09 1448
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.0653	1.20			1
1,2,3,7,8-PeCDD	0.659 J	0.0676	3.00	1.37	1.000	1
1,2,3,4,7,8-HxCDD	0.891 J	0.0448	3.00	1.19	0.998	1
1,2,3,6,7,8-HxCDD	2.31 JK	0.0397	3.00	1.48	1.000	1
1,2,3,7,8,9-HxCDD	2.35 J	0.0431	3.00	1.33	1.008	1
1,2,3,4,6,7,8-HpCDD	72.9 B	0.0486	3.00	1.02	1.000	1
OCDD	1680 BE	0.0641	6.01	0.89	1.000	1
2,3,7,8-TCDF	1.51 C	0.152	1.20	0.88	1.001	1
1,2,3,7,8-PeCDF	0.355 J	0.106	3.00	1.43	1.001	1
2,3,4,7,8-PeCDF	0.440 J	0.105	3.00	1.35	1.025	1
1,2,3,4,7,8-HxCDF	1.66 J	0.162	3.00	1.25	1.000	1
1,2,3,6,7,8-HxCDF	0.795 JK	0.156	3.00	1.52	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.203	3.00			1
2,3,4,6,7,8-HxCDF	0.761 J	0.174	3.00	1.11	1.017	1
1,2,3,4,6,7,8-HpCDF	19.6 B	0.102	3.00	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	1.29 J	0.139	3.00	1.05	1.034	1
OCDF	76.6 B	0.0609	6.01	0.89	1.004	1
Total Tetra-Dioxins	0.585 J	0.0653	1.20	0.66		1
Total Penta-Dioxins	5.15	0.0676	3.00	1.38		1
Total Hexa-Dioxins	19.2	0.0397	3.00	1.25		1
Total Hepta-Dioxins	148	0.0486	3.00	1.02		1
Total Tetra-Furans	2.55	0.152	1.20	0.75		1
Total Penta-Furans	5.64	0.105	3.00	1.46		1
Total Hexa-Furans	18.2	0.156	3.00	1.24		1
Total Hepta-Furans	62.4	0.102	3.00	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.520g
Data File Name: P205248
ICAL Date: 08/01/08
Date Analyzed: 12/4/09 1448
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P205246

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	604.205	60		40-135	0.75	1.009
13C-1,2,3,7,8-PeCDD	1000	772.559	77		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	2500	2041.765	82		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	2314.042	93		40-135	1.03	1.068
13C-OCDD	5000	3909.313	78		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	545.900	55		40-135	0.77	0.980
13C-1,2,3,7,8-PeCDF	1000	669.351	67		40-135	1.51	1.136
13C-1,2,3,4,7,8-HxCDF	2500	1812.243	72		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	2026.229	81		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	558.366	70		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0653	1	1	
1,2,3,7,8-PeCDD	0.659	0.0676	1	1	0.659
1,2,3,4,7,8-HxCDD	0.891	0.0448	1	0.1	0.0891
1,2,3,6,7,8-HxCDD	2.31	0.0397	1	0.1	0.231
1,2,3,7,8,9-HxCDD	2.35	0.0431	1	0.1	0.235
1,2,3,4,6,7,8-HpCDD	72.9	0.0486	1	0.01	0.729
OCDD	1680	0.0641	1	0.0003	0.504
2,3,7,8-TCDF	0.507	0.0999	1	0.1	0.0507
1,2,3,7,8-PeCDF	0.355	0.106	1	0.03	0.0107
2,3,4,7,8-PeCDF	0.440	0.105	1	0.3	0.132
1,2,3,4,7,8-HxCDF	1.66	0.162	1	0.1	0.166
1,2,3,6,7,8-HxCDF	0.795	0.156	1	0.1	0.0795
1,2,3,7,8,9-HxCDF	ND	0.203	1	0.1	
2,3,4,6,7,8-HxCDF	0.761	0.174	1	0.1	0.0761
1,2,3,4,6,7,8-HpCDF	19.6	0.102	1	0.01	0.196
1,2,3,4,7,8,9-HpCDF	1.29	0.139	1	0.01	0.0129
OCDF	76.6	0.0609	1	0.0003	0.0230

Total TEQ

3.19

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-22-110509
Lab Code: R0906411-023
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1610
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.520g
Data File Name: P205018
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1337
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	0.507 J	0.0999	1.20	0.86	1.000	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	557.667	56	40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	528.144	66	40-135	NA	0.987

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.786g
Data File Name: P106072
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0008
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.57	0.0993	1.17	0.87	1.001	1
1,2,3,7,8-PeCDD	8.65 K	0.137	2.92	1.81	1.000	1
1,2,3,4,7,8-HxCDD	24.1	0.906	2.92	1.29	0.998	1
1,2,3,6,7,8-HxCDD	67.8	0.822	2.92	1.21	1.000	1
1,2,3,7,8,9-HxCDD	96.7	0.870	2.92	1.32	1.009	1
1,2,3,4,6,7,8-HpCDD	2570 BE	3.30	2.92	1.05	1.000	1
OCDD	25400 BE	0.930	5.83	0.90	1.000	1
2,3,7,8-TCDF	15.8 C	0.808	1.17	0.76	1.001	1
1,2,3,7,8-PeCDF	6.80	0.303	2.92	1.64	1.001	1
2,3,4,7,8-PeCDF	7.25	0.300	2.92	1.75	1.024	1
1,2,3,4,7,8-HxCDF	47.9	1.01	2.92	1.28	1.000	1
1,2,3,6,7,8-HxCDF	25.0	0.964	2.92	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.30	2.92			1
2,3,4,6,7,8-HxCDF	20.4	1.11	2.92	1.09	1.017	1
1,2,3,4,6,7,8-HpCDF	771 BE	2.77	2.92	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	54.9	3.86	2.92	1.08	1.033	1
OCDF	5770 BE	0.252	5.83	0.89	1.004	1
Total Tetra-Dioxins	90.6	0.0993	1.17	0.78		1
Total Penta-Dioxins	50.2	0.137	2.92	1.46		1
Total Hexa-Dioxins	1090	0.822	2.92	1.26		1
Total Hepta-Dioxins	5180	3.30	2.92	1.05		1
Total Tetra-Furans	99.7	0.808	1.17	0.75		1
Total Penta-Furans	134	0.300	2.92	1.59		1
Total Hexa-Furans	629	0.964	2.92	1.27		1
Total Hepta-Furans	3230	2.77	2.92	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.786g
Data File Name: P106072
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0008
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	665.345	67		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	700.159	70		40-135	1.56	1.180
13C-1,2,3,6,7,8-HxCDD	2500	765.191	31	Y	40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1602.730	64		40-135	1.07	1.068
13C-OCDD	5000	2396.987	48		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	614.101	61		40-135	0.79	0.980
13C-1,2,3,7,8-PeCDF	1000	720.465	72		40-135	1.61	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1702.964	68		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1569.464	63		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	656.008	82		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509
Lab Code: R0906411-024
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.57	0.0993	1	1	4.57
1,2,3,7,8-PeCDD	8.65	0.137	1	1	8.65
1,2,3,4,7,8-HxCDD	24.1	0.906	1	0.1	2.41
1,2,3,6,7,8-HxCDD	67.8	0.822	1	0.1	6.78
1,2,3,7,8,9-HxCDD	96.7	0.870	1	0.1	9.67
1,2,3,4,6,7,8-HpCDD	2570	3.30	1	0.01	25.7
OCDD	25400	0.930	1	0.0003	7.62
2,3,7,8-TCDF	5.56	0.133	1	0.1	0.556
1,2,3,7,8-PeCDF	6.80	0.303	1	0.03	0.204
2,3,4,7,8-PeCDF	7.25	0.300	1	0.3	2.18
1,2,3,4,7,8-HxCDF	47.9	1.01	1	0.1	4.79
1,2,3,6,7,8-HxCDF	25.0	0.964	1	0.1	2.50
1,2,3,7,8,9-HxCDF	ND	1.30	1	0.1	
2,3,4,6,7,8-HxCDF	20.4	1.11	1	0.1	2.04
1,2,3,4,6,7,8-HpCDF	771	2.77	1	0.01	7.71
1,2,3,4,7,8,9-HpCDF	54.9	3.86	1	0.01	0.549
OCDF	5770	0.252	1	0.0003	1.73

Total TEQ 87.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-23-110509	Units:	ng/Kg
Lab Code:	R0906411-024	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	79.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 1414
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.786g	Instrument Name:	E-HRMS-04
Data File Name:	P205019	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P205011
		Cal Ver. File Name:	P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	5.56	0.133	1.17	0.85	1.000	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	705.270	71		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	682.428	85		40-135	NA	0.987

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.585g
Data File Name: P106073
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0056
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	4.08	0.156	1.23	0.78	1.001	1
1,2,3,7,8-PeCDD	5.88	0.206	3.07	1.61	1.000	1
1,2,3,4,7,8-HxCDD	11.7	0.620	3.07	1.19	0.998	1
1,2,3,6,7,8-HxCDD	50.1	0.562	3.07	1.23	1.000	1
1,2,3,7,8,9-HxCDD	32.0	0.595	3.07	1.16	1.009	1
1,2,3,4,6,7,8-HpCDD	1780 BE	6.07	3.07	1.06	1.000	1
OCDD	19500 BE	1.13	6.13	0.90	1.000	1
2,3,7,8-TCDF	11.4 C	0.371	1.23	0.83	1.001	1
1,2,3,7,8-PeCDF	4.52	0.286	3.07	1.71	1.001	1
2,3,4,7,8-PeCDF	5.47	0.283	3.07	1.57	1.025	1
1,2,3,4,7,8-HxCDF	29.7	0.762	3.07	1.27	1.000	1
1,2,3,6,7,8-HxCDF	14.2	0.728	3.07	1.10	1.004	1
1,2,3,7,8,9-HxCDF	ND U	0.976	3.07			1
2,3,4,6,7,8-HxCDF	15.4	0.833	3.07	1.14	1.017	1
1,2,3,4,6,7,8-HpCDF	536 B	1.39	3.07	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	34.6	1.93	3.07	1.07	1.034	1
OCDF	3950 BE	0.418	6.13	0.90	1.004	1
Total Tetra-Dioxins	68.0	0.156	1.23	0.78		1
Total Penta-Dioxins	77.9	0.206	3.07	1.55		1
Total Hexa-Dioxins	361	0.562	3.07	1.28		1
Total Hepta-Dioxins	3670	6.07	3.07	1.05		1
Total Tetra-Furans	68.2	0.371	1.23	0.78		1
Total Penta-Furans	110	0.283	3.07	1.58		1
Total Hexa-Furans	263	0.728	3.07	1.29		1
Total Hepta-Furans	2220	1.39	3.07	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/5/09 1650
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-23-110509-D	Units:	Percent
Lab Code:	R0906411-025	Basis:	Dry
		Percent Solids:	77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0056
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.585g	Instrument Name:	E-HRMS-03
Data File Name:	P106073	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	569.386	57		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	568.785	57		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1430.891	57		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1378.064	55		40-135	1.07	1.068
13C-OCDD	5000	2080.024	42		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	553.671	55		40-135	0.76	0.980
13C-1,2,3,7,8-PeCDF	1000	559.245	56		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1514.154	61		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1373.704	55		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	513.169	64		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	4.08	0.156	1	1	4.08
1,2,3,7,8-PeCDD	5.88	0.206	1	1	5.88
1,2,3,4,7,8-HxCDD	11.7	0.620	1	0.1	1.17
1,2,3,6,7,8-HxCDD	50.1	0.562	1	0.1	5.01
1,2,3,7,8,9-HxCDD	32.0	0.595	1	0.1	3.20
1,2,3,4,6,7,8-HpCDD	1780	6.07	1	0.01	17.8
OCDD	19500	1.13	1	0.0003	5.85
2,3,7,8-TCDF	4.05	0.0964	1	0.1	0.405
1,2,3,7,8-PeCDF	4.52	0.286	1	0.03	0.136
2,3,4,7,8-PeCDF	5.47	0.283	1	0.3	1.64
1,2,3,4,7,8-HxCDF	29.7	0.762	1	0.1	2.97
1,2,3,6,7,8-HxCDF	14.2	0.728	1	0.1	1.42
1,2,3,7,8,9-HxCDF	ND	0.976	1	0.1	
2,3,4,6,7,8-HxCDF	15.4	0.833	1	0.1	1.54
1,2,3,4,6,7,8-HpCDF	536	1.39	1	0.01	5.36
1,2,3,4,7,8,9-HpCDF	34.6	1.93	1	0.01	0.346
OCDF	3950	0.418	1	0.0003	1.19

Total TEQ 58.0

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-23-110509-D
Lab Code: R0906411-025
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/5/09 1650
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 77.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.585g
Data File Name: P205020
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1450
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.05	0.0964	1.23	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	610.359	61		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	576.235	72		40-135	NA	0.988

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0845
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-24-110609	Units:	ng/Kg
Lab Code:	R0906411-026	Basis:	Dry
		Percent Solids:	74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0143
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.393g	Instrument Name:	E-HRMS-03
Data File Name:	P106074	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	3.92	0.114	1.30	0.75	1.001	1
1,2,3,7,8-PeCDD	10.1	0.176	3.25	1.74	1.000	1
1,2,3,4,7,8-HxCDD	20.7	0.695	3.25	1.23	0.998	1
1,2,3,6,7,8-HxCDD	83.2	0.630	3.25	1.25	1.000	1
1,2,3,7,8,9-HxCDD	52.4	0.667	3.25	1.33	1.009	1
1,2,3,4,6,7,8-HpCDD	2910 BE	8.66	3.25	1.04	1.000	1
OCDD	29900 BE	1.09	6.50	0.90	1.000	1
2,3,7,8-TCDF	14.1 C	0.386	1.30	0.78	1.001	1
1,2,3,7,8-PeCDF	5.03 K	0.275	3.25	1.86	1.001	1
2,3,4,7,8-PeCDF	7.78	0.272	3.25	1.43	1.025	1
1,2,3,4,7,8-HxCDF	57.2	1.11	3.25	1.20	1.000	1
1,2,3,6,7,8-HxCDF	25.9	1.06	3.25	1.37	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.42	3.25			1
2,3,4,6,7,8-HxCDF	35.3	1.21	3.25	1.25	1.017	1
1,2,3,4,6,7,8-HpCDF	1040 BE	4.15	3.25	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	71.5	5.77	3.25	1.04	1.034	1
OCDF	7310 BE	0.451	6.50	0.90	1.004	1
Total Tetra-Dioxins	54.0	0.114	1.30	0.79		1
Total Penta-Dioxins	105	0.176	3.25	1.41		1
Total Hexa-Dioxins	597	0.630	3.25	1.28		1
Total Hepta-Dioxins	6010	8.66	3.25	1.05		1
Total Tetra-Furans	88.5	0.386	1.30	0.86		1
Total Penta-Furans	165	0.272	3.25	1.61		1
Total Hexa-Furans	534	1.06	3.25	1.21		1
Total Hepta-Furans	4310	4.15	3.25	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0845
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-24-110609	Units:	Percent
Lab Code:	R0906411-026	Basis:	Dry
		Percent Solids:	74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0143
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.393g	Instrument Name:	E-HRMS-03
Data File Name:	P106074	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	618.043	62		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	624.146	62		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1321.713	53		40-135	1.25	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1228.336	49		40-135	1.08	1.068
13C-OCDD	5000	1822.654	36	Y	40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	635.362	64		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	633.477	63		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1413.625	57		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1193.448	48		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	538.063	67		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-24-110609
Lab Code: R0906411-026
Service Request: R0906411
Date Collected: 11/6/09 0845
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	3.92	0.114	1	1	3.92
1,2,3,7,8-PeCDD	10.1	0.176	1	1	10.1
1,2,3,4,7,8-HxCDD	20.7	0.695	1	0.1	2.07
1,2,3,6,7,8-HxCDD	83.2	0.630	1	0.1	8.32
1,2,3,7,8,9-HxCDD	52.4	0.667	1	0.1	5.24
1,2,3,4,6,7,8-HpCDD	2910	8.66	1	0.01	29.1
OCDD	29900	1.09	1	0.0003	8.97
2,3,7,8-TCDF	5.03	0.137	1	0.1	0.503
1,2,3,7,8-PeCDF	5.03	0.275	1	0.03	0.151
2,3,4,7,8-PeCDF	7.78	0.272	1	0.3	2.33
1,2,3,4,7,8-HxCDF	57.2	1.11	1	0.1	5.72
1,2,3,6,7,8-HxCDF	25.9	1.06	1	0.1	2.59
1,2,3,7,8,9-HxCDF	ND	1.42	1	0.1	
2,3,4,6,7,8-HxCDF	35.3	1.21	1	0.1	3.53
1,2,3,4,6,7,8-HpCDF	1040	4.15	1	0.01	10.4
1,2,3,4,7,8,9-HpCDF	71.5	5.77	1	0.01	0.715
OCDF	7310	0.451	1	0.0003	2.19

Total TEQ 95.8

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-24-110609
Lab Code: R0906411-026
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 0845
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.0

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.393g
Data File Name: P205021
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 1527
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205011
Cal Ver. File Name: P205010

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor	
2,3,7,8-TCDF	5.03	0.137	1.30	0.73	1.001	1	
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	629.767	63		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	529.028	66		40-135	NA	0.988

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: R0906411-027
Service Request: R0906411
Date Collected: 11/6/09 0909
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.361g
Data File Name: P106075
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 0231
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	41.4	0.0966	1.28	0.77	1.001	1
1,2,3,7,8-PeCDD	9.32	0.181	3.20	1.40	1.000	1
1,2,3,4,7,8-HxCDD	18.0	0.980	3.20	1.23	0.998	1
1,2,3,6,7,8-HxCDD	61.1	0.889	3.20	1.29	1.000	1
1,2,3,7,8,9-HxCDD	36.1 K	0.941	3.20	1.48	1.009	1
1,2,3,4,6,7,8-HpCDD	2150 BE	6.53	3.20	1.05	1.000	1
OCDD	27500 BE	1.06	6.41	0.90	1.000	1
2,3,7,8-TCDF	22.6 C	0.140	1.28	0.81	1.001	1
1,2,3,7,8-PeCDF	6.37	0.288	3.20	1.60	1.001	1
2,3,4,7,8-PeCDF	10.5	0.285	3.20	1.58	1.025	1
1,2,3,4,7,8-HxCDF	52.4	1.20	3.20	1.26	1.000	1
1,2,3,6,7,8-HxCDF	25.2	1.15	3.20	1.29	1.004	1
1,2,3,7,8,9-HxCDF	ND U	1.54	3.20			1
2,3,4,6,7,8-HxCDF	32.4	1.31	3.20	1.30	1.017	1
1,2,3,4,6,7,8-HpCDF	613 B	5.09	3.20	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	52.4	7.08	3.20	1.04	1.034	1
OCDF	3970 BE	0.428	6.41	0.90	1.004	1
Total Tetra-Dioxins	108	0.0966	1.28	0.76		1
Total Penta-Dioxins	87.9	0.181	3.20	1.58		1
Total Hexa-Dioxins	443	0.889	3.20	1.28		1
Total Hepta-Dioxins	4420	6.53	3.20	1.05		1
Total Tetra-Furans	111	0.140	1.28	0.77		1
Total Penta-Furans	201	0.285	3.20	1.61		1
Total Hexa-Furans	592	1.15	3.20	1.25		1
Total Hepta-Furans	2350	5.09	3.20	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0909
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-25-110609	Units:	Percent
Lab Code:	R0906411-027	Basis:	Dry
		Percent Solids:	75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0231
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.361g	Instrument Name:	E-HRMS-03
Data File Name:	P106075	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	574.064	57		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	591.327	59		40-135	1.61	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1502.626	60		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1436.142	57		40-135	1.09	1.068
13C-OCDD	5000	2127.300	43		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	558.152	56		40-135	0.78	0.980
13C-1,2,3,7,8-PeCDF	1000	540.756	54		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1594.496	64		40-135	0.54	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1410.361	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	516.867	65		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-25-110609
Lab Code: R0906411-027
Service Request: R0906411
Date Collected: 11/6/09 0909
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	41.4	0.0966	1	1	41.4
1,2,3,7,8-PeCDD	9.32	0.181	1	1	9.32
1,2,3,4,7,8-HxCDD	18.0	0.980	1	0.1	1.80
1,2,3,6,7,8-HxCDD	61.1	0.889	1	0.1	6.11
1,2,3,7,8,9-HxCDD	36.1	0.941	1	0.1	3.61
1,2,3,4,6,7,8-HpCDD	2150	6.53	1	0.01	21.5
OCDD	27500	1.06	1	0.0003	8.25
2,3,7,8-TCDF	8.34	0.0893	1	0.1	0.834
1,2,3,7,8-PeCDF	6.37	0.288	1	0.03	0.191
2,3,4,7,8-PeCDF	10.5	0.285	1	0.3	3.15
1,2,3,4,7,8-HxCDF	52.4	1.20	1	0.1	5.24
1,2,3,6,7,8-HxCDF	25.2	1.15	1	0.1	2.52
1,2,3,7,8,9-HxCDF	ND	1.54	1	0.1	
2,3,4,6,7,8-HxCDF	32.4	1.31	1	0.1	3.24
1,2,3,4,6,7,8-HpCDF	613	5.09	1	0.01	6.13
1,2,3,4,7,8,9-HpCDF	52.4	7.08	1	0.01	0.524
OCDF	3970	0.428	1	0.0003	1.19

Total TEQ 115

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0909
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-25-110609	Units:	ng/Kg
Lab Code:	R0906411-027	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	75.3

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 2307
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.361g	Instrument Name:	E-HRMS-04
Data File Name:	P205032	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P205027
		Cal Ver. File Name:	P205024

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	8.34		0.0893	1.28	0.83	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	607.125	61		40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	561.515	70		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0942
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-26-110609	Units:	ng/Kg
Lab Code:	R0906411-028	Basis:	Dry
		Percent Solids:	75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0319
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.886g	Instrument Name:	E-HRMS-03
Data File Name:	P106076	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	2.46	0.0946	1.12	0.78	1.001	1
1,2,3,7,8-PeCDD	4.46	0.161	2.80	1.57	1.000	1
1,2,3,4,7,8-HxCDD	6.79	0.254	2.80	1.28	0.998	1
1,2,3,6,7,8-HxCDD	29.2	0.231	2.80	1.23	1.000	1
1,2,3,7,8,9-HxCDD	18.3	0.244	2.80	1.30	1.009	1
1,2,3,4,6,7,8-HpCDD	1050 BE	1.76	2.80	1.04	1.000	1
OCDD	11300 BE	1.11	5.60	0.90	1.000	1
2,3,7,8-TCDF	9.38 C	0.342	1.12	0.74	1.001	1
1,2,3,7,8-PeCDF	2.96 K	0.292	2.80	2.19	1.001	1
2,3,4,7,8-PeCDF	3.76	0.289	2.80	1.72	1.025	1
1,2,3,4,7,8-HxCDF	20.8	0.674	2.80	1.27	1.000	1
1,2,3,6,7,8-HxCDF	10.6	0.644	2.80	1.19	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.864	2.80			1
2,3,4,6,7,8-HxCDF	12.0	0.737	2.80	1.21	1.017	1
1,2,3,4,6,7,8-HpCDF	297 B	1.64	2.80	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	17.9	2.27	2.80	0.97	1.035	1
OCDF	1940 BE	0.461	5.60	0.90	1.004	1
Total Tetra-Dioxins	40.6	0.0946	1.12	0.74		1
Total Penta-Dioxins	52.8	0.161	2.80	1.57		1
Total Hexa-Dioxins	247	0.231	2.80	1.22		1
Total Hepta-Dioxins	2250	1.76	2.80	1.05		1
Total Tetra-Furans	55.2	0.342	1.12	0.77		1
Total Penta-Furans	83.3	0.289	2.80	1.61		1
Total Hexa-Furans	262	0.644	2.80	1.30		1
Total Hepta-Furans	1160	1.64	2.80	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 0942
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-26-110609	Units:	Percent
Lab Code:	R0906411-028	Basis:	Dry
		Percent Solids:	75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 0319
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.886g	Instrument Name:	E-HRMS-03
Data File Name:	P106076	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106064

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	636.731	64		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	642.611	64		40-135	1.58	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1645.150	66		40-135	1.28	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1544.312	62		40-135	1.08	1.068
13C-OCDD	5000	2334.978	47		40-135	0.87	1.147
13C-2,3,7,8-TCDF	1000	616.251	62		40-135	0.75	0.980
13C-1,2,3,7,8-PeCDF	1000	618.516	62		40-135	1.55	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1703.936	68		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1528.975	61		40-135	0.45	1.044
37Cl-2,3,7,8-TCDD	800	583.264	73		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-26-110609
Lab Code: R0906411-028
Service Request: R0906411
Date Collected: 11/6/09 0942
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	2.46	0.0946	1	1	2.46
1,2,3,7,8-PeCDD	4.46	0.161	1	1	4.46
1,2,3,4,7,8-HxCDD	6.79	0.254	1	0.1	0.679
1,2,3,6,7,8-HxCDD	29.2	0.231	1	0.1	2.92
1,2,3,7,8,9-HxCDD	18.3	0.244	1	0.1	1.83
1,2,3,4,6,7,8-HpCDD	1050	1.76	1	0.01	10.5
OCDD	11300	1.11	1	0.0003	3.39
2,3,7,8-TCDF	4.07	0.0640	1	0.1	0.407
1,2,3,7,8-PeCDF	2.96	0.292	1	0.03	0.0888
2,3,4,7,8-PeCDF	3.76	0.289	1	0.3	1.13
1,2,3,4,7,8-HxCDF	20.8	0.674	1	0.1	2.08
1,2,3,6,7,8-HxCDF	10.6	0.644	1	0.1	1.06
1,2,3,7,8,9-HxCDF	ND	0.864	1	0.1	
2,3,4,6,7,8-HxCDF	12.0	0.737	1	0.1	1.20
1,2,3,4,6,7,8-HpCDF	297	1.64	1	0.01	2.97
1,2,3,4,7,8,9-HpCDF	17.9	2.27	1	0.01	0.179
OCDF	1940	0.461	1	0.0003	0.582

Total TEQ 35.9

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-26-110609
Lab Code: R0906411-028
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 0942
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.886g
Data File Name: P205033
ICAL Date: 03/16/09
Date Analyzed: 11/17/09 2344
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	4.07	0.0640	1.12	0.80	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	683.037	68	40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	612.122	77	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P106085
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1152
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.22	0.0980	1.17	0.75	1.001	1
1,2,3,7,8-PeCDD	13.0	0.203	2.93	1.61	1.000	1
1,2,3,4,7,8-HxCDD	25.5	0.543	2.93	1.25	0.999	1
1,2,3,6,7,8-HxCDD	141	0.492	2.93	1.27	1.000	1
1,2,3,7,8,9-HxCDD	72.2	0.521	2.93	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	3630 BE	3.56	2.93	1.05	1.000	1
OCDD	30400 BE	0.436	5.86	0.90	1.000	1
2,3,7,8-TCDF	24.6 C	0.619	1.17	0.79	1.001	1
1,2,3,7,8-PeCDF	8.98	0.958	2.93	1.51	1.001	1
2,3,4,7,8-PeCDF	11.4	0.948	2.93	1.45	1.025	1
1,2,3,4,7,8-HxCDF	50.9	0.230	2.93	1.25	1.000	1
1,2,3,6,7,8-HxCDF	26.4	0.220	2.93	1.30	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.295	2.93			1
2,3,4,6,7,8-HxCDF	34.1	0.252	2.93	1.32	1.017	1
1,2,3,4,6,7,8-HpCDF	736 BE	1.15	2.93	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	55.5	1.60	2.93	1.03	1.034	1
OCDF	4150 BE	0.211	5.86	0.90	1.004	1
Total Tetra-Dioxins	99.1	0.0980	1.17	0.80		1
Total Penta-Dioxins	145	0.203	2.93	1.50		1
Total Hexa-Dioxins	790	0.492	2.93	1.28		1
Total Hepta-Dioxins	6690	3.56	2.93	1.05		1
Total Tetra-Furans	167	0.619	1.17	0.82		1
Total Penta-Furans	267	0.948	2.93	1.61		1
Total Hexa-Furans	490	0.220	2.93	1.24		1
Total Hepta-Furans	2870	1.15	2.93	1.05		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P106085
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1152
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	608.720	61		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	592.322	59		40-135	1.57	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1434.374	57		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1427.323	57		40-135	1.07	1.068
13C-OCDD	5000	2302.016	46		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	615.238	62		40-135	0.78	0.980
13C-1,2,3,7,8-PeCDF	1000	549.525	55		40-135	1.58	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1548.590	62		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1391.919	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	542.769	68		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.22	0.0980	1	1	7.22
1,2,3,7,8-PeCDD	13.0	0.203	1	1	13.0
1,2,3,4,7,8-HxCDD	25.5	0.543	1	0.1	2.55
1,2,3,6,7,8-HxCDD	141	0.492	1	0.1	14.1
1,2,3,7,8,9-HxCDD	72.2	0.521	1	0.1	7.22
1,2,3,4,6,7,8-HpCDD	4750	5.02	10	0.01	47.5
OCDD	38000	2.41	10	0.0003	11.4
2,3,7,8-TCDF	9.81	0.0738	1	0.1	0.981
1,2,3,7,8-PeCDF	8.98	0.958	1	0.03	0.269
2,3,4,7,8-PeCDF	11.4	0.948	1	0.3	3.42
1,2,3,4,7,8-HxCDF	50.9	0.230	1	0.1	5.09
1,2,3,6,7,8-HxCDF	26.4	0.220	1	0.1	2.64
1,2,3,7,8,9-HxCDF	ND	0.295	1	0.1	
2,3,4,6,7,8-HxCDF	34.1	0.252	1	0.1	3.41
1,2,3,4,6,7,8-HpCDF	962	6.33	10	0.01	9.62
1,2,3,4,7,8,9-HpCDF	55.5	1.60	1	0.01	0.555
OCDF	5660	1.72	10	0.0003	1.70

Total TEQ

131

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g

Data File Name: P106296
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1953
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.67 J	1.85	11.7	0.82	1.001	10
1,2,3,7,8-PeCDD	20.3 J	1.28	29.3	1.33	1.000	10
1,2,3,4,7,8-HxCDD	38.9	2.33	29.3	1.38	0.998	10
1,2,3,6,7,8-HxCDD	193	2.11	29.3	1.20	1.000	10
1,2,3,7,8,9-HxCDD	106	2.23	29.3	1.37	1.008	10
1,2,3,4,6,7,8-HpCDD	4750 B	5.02	29.3	1.05	1.000	10
OCDD	38000 BE	2.41	58.6	0.90	1.000	10
2,3,7,8-TCDF	31.4 C	2.51	11.7	0.79	1.001	10
1,2,3,7,8-PeCDF	17.1 J	1.82	29.3	1.45	1.000	10
2,3,4,7,8-PeCDF	17.1 J	1.80	29.3	1.37	1.024	10
1,2,3,4,7,8-HxCDF	69.5	1.63	29.3	1.13	1.000	10
1,2,3,6,7,8-HxCDF	32.1	1.56	29.3	1.18	1.003	10
1,2,3,7,8,9-HxCDF	ND U	2.09	29.3			10
2,3,4,6,7,8-HxCDF	26.9 J	1.78	29.3	1.15	1.017	10
1,2,3,4,6,7,8-HpCDF	962 B	6.33	29.3	1.07	1.000	10
1,2,3,4,7,8,9-HpCDF	91.3	8.80	29.3	0.92	1.033	10
OCDF	5660 B	1.72	58.6	0.90	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g

Data File Name: P106296
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 1953
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1640	1119.455	68		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1690	1242.713	73		40-135	1.56	1.179
13C-1,2,3,6,7,8-HxCDD	4390	2723.117	62		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4390	3085.735	70		40-135	1.06	1.068
13C-OCDD	10900	5758.321	53		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1610	1228.199	76		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1820	1320.965	73		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	4030	2658.168	66		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	4460	3078.259	69		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	75.579	94		40-135	NA	1.009

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-27-110609
Lab Code: R0906411-029
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1010
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.188g
Data File Name: P205034
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0021
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	9.81	0.0738	1.17	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	638.989	64		40-135	0.76	1.060
37Cl-2,3,7,8-TCDD	800	547.038	68		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g
Data File Name: P106086
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1240
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	7.80	0.0976	1.18	0.76	1.001	1
1,2,3,7,8-PeCDD	9.89	0.142	2.94	1.56	1.000	1
1,2,3,4,7,8-HxCDD	21.1	0.432	2.94	1.22	0.999	1
1,2,3,6,7,8-HxCDD	107	0.392	2.94	1.26	1.000	1
1,2,3,7,8,9-HxCDD	60.3	0.415	2.94	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	3790 BE	6.82	2.94	1.05	1.000	1
OCDD	39600 BE	0.785	5.89	0.90	1.000	1
2,3,7,8-TCDF	25.9 C	0.154	1.18	0.77	1.001	1
1,2,3,7,8-PeCDF	5.19 K	0.624	2.94	1.89	1.000	1
2,3,4,7,8-PeCDF	10.3	0.617	2.94	1.72	1.025	1
1,2,3,4,7,8-HxCDF	47.2	0.138	2.94	1.25	1.000	1
1,2,3,6,7,8-HxCDF	20.2	0.132	2.94	1.28	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.177	2.94			1
2,3,4,6,7,8-HxCDF	26.1	0.151	2.94	1.24	1.017	1
1,2,3,4,6,7,8-HpCDF	1040 BE	2.25	2.94	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	62.1	3.13	2.94	1.02	1.034	1
OCDF	9340 BE	0.245	5.89	0.91	1.004	1
Total Tetra-Dioxins	590	0.0976	1.18	0.79		1
Total Penta-Dioxins	113	0.142	2.94	1.50		1
Total Hexa-Dioxins	639	0.392	2.94	1.25		1
Total Hepta-Dioxins	7240	6.82	2.94	1.05		1
Total Tetra-Furans	189	0.154	1.18	0.81		1
Total Penta-Furans	226	0.617	2.94	1.60		1
Total Hexa-Furans	776	0.132	2.94	1.25		1
Total Hepta-Furans	4500	2.25	2.94	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g
Data File Name: P106086
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1240
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	736.219	74		40-135	0.78	1.010
13C-1,2,3,7,8-PeCDD	1000	746.839	75		40-135	1.58	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1876.331	75		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1788.105	72		40-135	1.07	1.068
13C-OCDD	5000	2472.554	49		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1000	741.795	74		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	714.055	71		40-135	1.59	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1966.564	79		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1784.129	71		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	708.490	89		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	7.80	0.0976	1	1	7.80
1,2,3,7,8-PeCDD	9.89	0.142	1	1	9.89
1,2,3,4,7,8-HxCDD	21.1	0.432	1	0.1	2.11
1,2,3,6,7,8-HxCDD	107	0.392	1	0.1	10.7
1,2,3,7,8,9-HxCDD	60.3	0.415	1	0.1	6.03
1,2,3,4,6,7,8-HpCDD	7190	6.02	10	0.01	71.9
OCDD	87400	2.61	10	0.0003	26.2
2,3,7,8-TCDF	6.23	0.103	1	0.1	0.623
1,2,3,7,8-PeCDF	5.19	0.624	1	0.03	0.156
2,3,4,7,8-PeCDF	10.3	0.617	1	0.3	3.09
1,2,3,4,7,8-HxCDF	47.2	0.138	1	0.1	4.72
1,2,3,6,7,8-HxCDF	20.2	0.132	1	0.1	2.02
1,2,3,7,8,9-HxCDF	ND	0.177	1	0.1	
2,3,4,6,7,8-HxCDF	26.1	0.151	1	0.1	2.61
1,2,3,4,6,7,8-HpCDF	1950	5.62	10	0.01	19.5
1,2,3,4,7,8,9-HpCDF	62.1	3.13	1	0.01	0.621
OCDF	18500	2.38	10	0.0003	5.55

Total TEQ

174

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g

Data File Name: P106297
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2041
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	10.8 JK	1.39	11.8	1.09	1.001	10
1,2,3,7,8-PeCDD	20.6 J	1.89	29.4	1.73	1.000	10
1,2,3,4,7,8-HxCDD	43.0	2.50	29.4	1.19	0.998	10
1,2,3,6,7,8-HxCDD	208	2.27	29.4	1.26	1.000	10
1,2,3,7,8,9-HxCDD	122	2.40	29.4	1.21	1.008	10
1,2,3,4,6,7,8-HpCDD	7190 B	6.02	29.4	1.05	1.000	10
OCDD	87400 BE	2.61	58.9	0.90	1.000	10
2,3,7,8-TCDF	44.4 C	1.67	11.8	0.76	1.002	10
1,2,3,7,8-PeCDF	13.7 J	2.34	29.4	1.70	1.000	10
2,3,4,7,8-PeCDF	21.0 J	2.31	29.4	1.77	1.024	10
1,2,3,4,7,8-HxCDF	89.7	4.77	29.4	1.26	1.000	10
1,2,3,6,7,8-HxCDF	34.7	4.56	29.4	1.21	1.003	10
1,2,3,7,8,9-HxCDF	ND U	6.11	29.4			10
2,3,4,6,7,8-HxCDF	26.2 J	5.21	29.4	1.13	1.017	10
1,2,3,4,6,7,8-HpCDF	1950 B	5.62	29.4	1.04	1.000	10
1,2,3,4,7,8,9-HpCDF	145	7.82	29.4	1.05	1.033	10
OCDF	18500 B	2.38	58.9	0.89	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-28-110609
Lab Code: R0906411-030
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1040
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.106g

Data File Name: P106297
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2041
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1350	1031.190	76		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1330	1116.403	84		40-135	1.59	1.179
13C-1,2,3,6,7,8-HxCDD	3330	2525.657	76		40-135	1.27	0.992
13C-1,2,3,4,6,7,8-HpCDD	3470	2899.136	83		40-135	1.06	1.068
13C-OCDD	10200	5540.938	54		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1350	1124.408	83		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1410	1194.451	85		40-135	1.56	1.140
13C-1,2,3,4,7,8-HxCDF	3160	2493.609	79		40-135	0.53	0.970
13C-1,2,3,4,6,7,8-HpCDF	3520	2855.269	81		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	131.594	164	Y	40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1040
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-28-110609	Units:	ng/Kg
Lab Code:	R0906411-030	Basis:	Dry
Run Type:	Reanalysis	Percent Solids:	76.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/18/09 0057
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	11.106g	Instrument Name:	E-HRMS-04
Data File Name:	P205035	GC Column:	DB-225
ICAL Date:	03/16/09	Blank File Name:	P205027
		Cal Ver. File Name:	P205024

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	6.23		0.103	1.18	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	779.650	78		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	722.132	90		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g
Data File Name: P106087
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1327
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	9.29	0.105	1.17	0.79	1.000	1
1,2,3,7,8-PeCDD	21.0	0.207	2.93	1.66	1.000	1
1,2,3,4,7,8-HxCDD	43.0	0.432	2.93	1.28	0.999	1
1,2,3,6,7,8-HxCDD	347	0.392	2.93	1.26	1.000	1
1,2,3,7,8,9-HxCDD	121	0.415	2.93	1.29	1.009	1
1,2,3,4,6,7,8-HpCDD	13100 BE	17.6	2.93	1.05	1.000	1
OCDD	424000 BE	3.96	5.87	0.96	1.000	1
2,3,7,8-TCDF	31.1 C	0.261	1.17	0.77	1.001	1
1,2,3,7,8-PeCDF	10.0	0.807	2.93	1.65	1.001	1
2,3,4,7,8-PeCDF	17.4	0.798	2.93	1.62	1.025	1
1,2,3,4,7,8-HxCDF	106	0.199	2.93	1.26	1.000	1
1,2,3,6,7,8-HxCDF	41.4	0.190	2.93	1.34	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.254	2.93			1
2,3,4,6,7,8-HxCDF	56.6	0.217	2.93	1.27	1.017	1
1,2,3,4,6,7,8-HpCDF	3480 BE	7.29	2.93	1.06	1.000	1
1,2,3,4,7,8,9-HpCDF	270	10.2	2.93	1.06	1.034	1
OCDF	70200 BE	0.995	5.87	0.91	1.004	1
Total Tetra-Dioxins	306	0.105	1.17	0.80		1
Total Penta-Dioxins	180	0.207	2.93	1.57		1
Total Hexa-Dioxins	1830	0.392	2.93	1.25		1
Total Hepta-Dioxins	24900	17.6	2.93	1.05		1
Total Tetra-Furans	182	0.261	1.17	0.84		1
Total Penta-Furans	411	0.798	2.93	1.60		1
Total Hexa-Furans	992	0.190	2.93	1.28		1
Total Hepta-Furans	19400	7.29	2.93	1.06		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g
Data File Name: P106087
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1327
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	713.608	71		40-135	0.80	1.010
13C-1,2,3,7,8-PeCDD	1000	702.727	70		40-135	1.55	1.180
13C-1,2,3,6,7,8-HxCDD	2500	1575.001	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1245.532	50		40-135	1.05	1.068
13C-OCDD	5000	1002.458	20	Y	40-135	0.95	1.148
13C-2,3,7,8-TCDF	1000	742.902	74		40-135	0.79	0.979
13C-1,2,3,7,8-PeCDF	1000	685.746	69		40-135	1.62	1.140
13C-1,2,3,4,7,8-HxCDF	2500	1703.458	68		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1406.950	56		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	665.021	83		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Saugest-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	9.29	0.105	1	1	9.29
1,2,3,7,8-PeCDD	21.0	0.207	1	1	21.0
1,2,3,4,7,8-HxCDD	43.0	0.432	1	0.1	4.30
1,2,3,6,7,8-HxCDD	347	0.392	1	0.1	34.7
1,2,3,7,8,9-HxCDD	121	0.415	1	0.1	12.1
1,2,3,4,6,7,8-HpCDD	19600	633	1000	0.01	196
OCDD	1120000	651	1000	0.0003	336
2,3,7,8-TCDF	11.3	0.0939	1	0.1	1.13
1,2,3,7,8-PeCDF	10.0	0.807	1	0.03	0.300
2,3,4,7,8-PeCDF	17.4	0.798	1	0.3	5.22
1,2,3,4,7,8-HxCDF	106	0.199	1	0.1	10.6
1,2,3,6,7,8-HxCDF	41.4	0.190	1	0.1	4.14
1,2,3,7,8,9-HxCDF	ND	0.254	1	0.1	
2,3,4,6,7,8-HxCDF	56.6	0.217	1	0.1	5.66
1,2,3,4,6,7,8-HpCDF	4230	189	1000	0.01	42.3
1,2,3,4,7,8,9-HpCDF	270	10.2	1	0.01	2.70
OCDF	83600	869	1000	0.0003	25.1

Total TEQ 711

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g

Data File Name: P106298
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2128
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	205	1170			1000
1,2,3,7,8-PeCDD	ND U	128	2930			1000
1,2,3,4,7,8-HxCDD	ND U	171	2930			1000
1,2,3,6,7,8-HxCDD	ND U	155	2930			1000
1,2,3,7,8,9-HxCDD	ND U	164	2930			1000
1,2,3,4,6,7,8-HpCDD	19600 B	633	2930	1.08	1.000	1000
OCDD	1120000 B	651	5870	0.89	1.000	1000
2,3,7,8-TCDF	ND U	152	1170			1000
1,2,3,7,8-PeCDF	ND U	149	2930			1000
2,3,4,7,8-PeCDF	ND U	148	2930			1000
1,2,3,4,7,8-HxCDF	ND U	191	2930			1000
1,2,3,6,7,8-HxCDF	ND U	183	2930			1000
1,2,3,7,8,9-HxCDF	ND U	245	2930			1000
2,3,4,6,7,8-HxCDF	ND U	209	2930			1000
1,2,3,4,6,7,8-HpCDF	4230 B	189	2930	1.03	1.000	1000
1,2,3,4,7,8,9-HpCDF	ND U	263	2930			1000
OCDF	83600 B	869	5870	0.84	1.004	1000

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g

Data File Name: P106298
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2128
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1410	1090.014	77		40-135	0.74	1.009
13C-1,2,3,7,8-PeCDD	1430	1170.652	82		40-135	1.57	1.180
13C-1,2,3,6,7,8-HxCDD	3970	2616.845	66		40-135	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	5000	3210.097	64		40-135	1.08	1.068
13C-OCDD	25000	5779.450	23	Y	40-135	0.88	1.147
13C-2,3,7,8-TCDF	1350	1178.548	87		40-135	0.75	0.978
13C-1,2,3,7,8-PeCDF	1450	1243.972	86		40-135	1.57	1.140
13C-1,2,3,4,7,8-HxCDF	3680	2655.664	72		40-135	0.51	0.971
13C-1,2,3,4,6,7,8-HpCDF	4460	3268.125	73		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	1.366	171	Y	40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-29-110609
Lab Code: R0906411-031
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1117
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 72.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 11.824g
Data File Name: P205036
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0134
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	11.3	0.0939	1.17	0.76	1.001	1
Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	757.199	76	40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	672.837	84	40-135	NA	0.986

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g
Data File Name: P106088
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1415
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	6.80	0.163	1.26	0.73	1.001	1
1,2,3,7,8-PeCDD	15.7	0.230	3.14	1.52	1.000	1
1,2,3,4,7,8-HxCDD	27.2	1.27	3.14	1.28	0.998	1
1,2,3,6,7,8-HxCDD	149	1.16	3.14	1.25	1.000	1
1,2,3,7,8,9-HxCDD	81.1	1.22	3.14	1.25	1.009	1
1,2,3,4,6,7,8-HpCDD	5270 BE	5.39	3.14	1.05	1.000	1
OCDD	51700 BE	3.63	6.28	0.90	1.000	1
2,3,7,8-TCDF	32.8 C	0.194	1.26	0.76	1.001	1
1,2,3,7,8-PeCDF	7.78	1.22	3.14	1.73	1.001	1
2,3,4,7,8-PeCDF	13.7	1.21	3.14	1.68	1.025	1
1,2,3,4,7,8-HxCDF	66.8	0.326	3.14	1.25	1.000	1
1,2,3,6,7,8-HxCDF	31.1	0.312	3.14	1.24	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.351	3.14			1
2,3,4,6,7,8-HxCDF	37.7	0.357	3.14	1.28	1.017	1
1,2,3,4,6,7,8-HpCDF	1310 BE	6.82	3.14	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	94.5	9.48	3.14	1.07	1.034	1
OCDF	12000 BE	0.517	6.28	0.90	1.004	1
Total Tetra-Dioxins	115	0.163	1.26	0.77		1
Total Penta-Dioxins	158	0.230	3.14	1.58		1
Total Hexa-Dioxins	988	1.16	3.14	1.27		1
Total Hepta-Dioxins	10200	5.39	3.14	1.05		1
Total Tetra-Furans	192	0.194	1.26	0.83		1
Total Penta-Furans	309	1.21	3.14	1.60		1
Total Hexa-Furans	575	0.312	3.14	1.28		1
Total Hepta-Furans	5910	6.82	3.14	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1145
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-30-110609	Units:	Percent
Lab Code:	R0906411-032	Basis:	Dry
		Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/17/09 1415
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.373g	Instrument Name:	E-HRMS-03
Data File Name:	P106088	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	655.561	66		40-135	0.79	1.009
13C-1,2,3,7,8-PeCDD	1000	629.697	63		40-135	1.54	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1569.998	63		40-135	1.26	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1511.288	60		40-135	1.06	1.068
13C-OCDD	5000	2197.991	44		40-135	0.90	1.147
13C-2,3,7,8-TCDF	1000	699.337	70		40-135	0.80	0.979
13C-1,2,3,7,8-PeCDF	1000	613.169	61		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1702.144	68		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1510.204	60		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	603.783	75		40-135	NA	1.011

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	6.80	0.163	1	1	6.80
1,2,3,7,8-PeCDD	15.7	0.230	1	1	15.7
1,2,3,4,7,8-HxCDD	27.2	1.27	1	0.1	2.72
1,2,3,6,7,8-HxCDD	149	1.16	1	0.1	14.9
1,2,3,7,8,9-HxCDD	81.1	1.22	1	0.1	8.11
1,2,3,4,6,7,8-HpCDD	5740	13.2	20	0.01	57.4
OCDD	62300	5.84	20	0.0003	18.7
2,3,7,8-TCDF	11.3	0.129	1	0.1	1.13
1,2,3,7,8-PeCDF	7.78	1.22	1	0.03	0.233
2,3,4,7,8-PeCDF	13.7	1.21	1	0.3	4.11
1,2,3,4,7,8-HxCDF	66.8	0.326	1	0.1	6.68
1,2,3,6,7,8-HxCDF	31.1	0.312	1	0.1	3.11
1,2,3,7,8,9-HxCDF	ND	0.351	1	0.1	
2,3,4,6,7,8-HxCDF	37.7	0.357	1	0.1	3.77
1,2,3,4,6,7,8-HpCDF	1290	5.90	20	0.01	12.9
1,2,3,4,7,8,9-HpCDF	94.5	9.48	1	0.01	0.945
OCDF	12500	6.31	20	0.0003	3.75

Total TEQ

161

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1145
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-30-110609	Units:	ng/Kg
Lab Code:	R0906411-032	Basis:	Dry
Run Type:	Dilution	Percent Solids:	76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	12/2/09 2216
Prep Method:	Method	Date Extracted:	11/11/09
Sample Amount:	10.373g	Instrument Name:	E-HRMS-03
Data File Name:	P106299	GC Column:	DB-5
ICAL Date:	09/11/09	Blank File Name:	P106058
		Cal Ver. File Name:	P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	4.65	25.1			20
1,2,3,7,8-PeCDD	18.6 J	3.67	62.8	1.63	1.000	20
1,2,3,4,7,8-HxCDD	37.1 J	4.12	62.8	1.09	0.998	20
1,2,3,6,7,8-HxCDD	161	3.74	62.8	1.25	1.000	20
1,2,3,7,8,9-HxCDD	95.0	3.96	62.8	1.33	1.008	20
1,2,3,4,6,7,8-HpCDD	5740 B	13.2	62.8	1.06	1.000	20
OCDD	62300 BE	5.84	126	0.90	1.000	20
2,3,7,8-TCDF	30.4 C	4.54	25.1	0.86	1.001	20
1,2,3,7,8-PeCDF	ND U	4.83	62.8			20
2,3,4,7,8-PeCDF	ND U	4.79	62.8			20
1,2,3,4,7,8-HxCDF	67.4	4.19	62.8	1.39	1.000	20
1,2,3,6,7,8-HxCDF	26.6 J	4.01	62.8	1.18	1.003	20
1,2,3,7,8,9-HxCDF	ND U	5.37	62.8			20
2,3,4,6,7,8-HxCDF	23.7 JK	4.59	62.8	0.97	1.017	20
1,2,3,4,6,7,8-HpCDF	1290 B	5.90	62.8	1.05	1.000	20
1,2,3,4,7,8,9-HpCDF	117	8.20	62.8	1.08	1.033	20
OCDF	12500 B	6.31	126	0.89	1.004	20

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g

Data File Name: P106299
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2216
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1520	1059.588	70		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1590	1085.607	68		40-135	1.60	1.179
13C-1,2,3,6,7,8-HxCDD	3970	2553.201	64		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4170	3001.420	72		40-135	1.09	1.068
13C-OCDD	11400	5837.365	51		40-135	0.89	1.146
13C-2,3,7,8-TCDF	1430	1135.221	79		40-135	0.76	0.978
13C-1,2,3,7,8-PeCDF	1640	1135.935	69		40-135	1.53	1.140
13C-1,2,3,4,7,8-HxCDF	3680	2512.709	68		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	4170	3068.897	74		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	28.283	71		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-30-110609
Lab Code: R0906411-032
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1145
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 76.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.373g
Data File Name: P205037
ICAL Date: 03/16/09
Date Analyzed: 11/18/09 0211
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	11.3	0.129	1.26	0.75	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	703.121	70		40-135	0.75	1.059
37Cl-2,3,7,8-TCDD	800	618.231	77		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106089
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1503
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	41.4	0.110	1.30	0.74	1.001	1
1,2,3,7,8-PeCDD	79.4	0.224	3.25	1.59	1.000	1
1,2,3,4,7,8-HxCDD	174	2.40	3.25	1.25	0.999	1
1,2,3,6,7,8-HxCDD	762 E	2.18	3.25	1.25	1.000	1
1,2,3,7,8,9-HxCDD	385	2.31	3.25	1.31	1.009	1
1,2,3,4,6,7,8-HpCDD	27900 BE	36.4	3.25	1.05	1.000	1
OCDD	232000 BE	3.95	6.50	0.96	1.000	1
2,3,7,8-TCDF	114 C	0.829	1.30	0.78	1.001	1
1,2,3,7,8-PeCDF	38.7	2.29	3.25	1.55	1.000	1
2,3,4,7,8-PeCDF	63.5	2.26	3.25	1.51	1.024	1
1,2,3,4,7,8-HxCDF	367	0.226	3.25	1.25	1.000	1
1,2,3,6,7,8-HxCDF	155	0.216	3.25	1.27	1.003	1
1,2,3,7,8,9-HxCDF	ND U	0.289	3.25			1
2,3,4,6,7,8-HxCDF	206	0.247	3.25	1.20	1.017	1
1,2,3,4,6,7,8-HpCDF	8340 BE	7.95	3.25	1.04	1.000	1
1,2,3,4,7,8,9-HpCDF	573	11.1	3.25	1.05	1.033	1
OCDF	92300 BE	0.860	6.50	0.90	1.004	1
Total Tetra-Dioxins	524	0.110	1.30	0.79		1
Total Penta-Dioxins	759	0.224	3.25	1.37		1
Total Hexa-Dioxins	5090	2.18	3.25	1.26		1
Total Hepta-Dioxins	55200	36.4	3.25	1.05		1
Total Tetra-Furans	747	0.829	1.30	0.76		1
Total Penta-Furans	1420	2.26	3.25	1.57		1
Total Hexa-Furans	3460	0.216	3.25	1.25		1
Total Hepta-Furans	37900	7.95	3.25	1.04		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106089
ICAL Date: 09/11/09
Date Analyzed: 11/17/09 1503
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106078

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	759.400	76		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	765.098	77		40-135	1.55	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1705.994	68		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1517.807	61		40-135	1.06	1.068
13C-OCDD	5000	1758.565	35	Y	40-135	0.92	1.149
13C-2,3,7,8-TCDF	1000	776.677	78		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	731.542	73		40-135	1.60	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1830.062	73		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1554.710	62		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	698.098	87		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	41.4	0.110	1	1	41.4
1,2,3,7,8-PeCDD	79.4	0.224	1	1	79.4
1,2,3,4,7,8-HxCDD	174	2.40	1	0.1	17.4
1,2,3,6,7,8-HxCDD	526	91.3	500	0.1	52.6
1,2,3,7,8,9-HxCDD	385	2.31	1	0.1	38.5
1,2,3,4,6,7,8-HpCDD	18700	245	500	0.01	187
OCDD	255000	285	500	0.0003	76.5
2,3,7,8-TCDF	41.0	0.256	1	0.1	4.10
1,2,3,7,8-PeCDF	38.7	2.29	1	0.03	1.16
2,3,4,7,8-PeCDF	63.5	2.26	1	0.3	19.1
1,2,3,4,7,8-HxCDF	367	0.226	1	0.1	36.7
1,2,3,6,7,8-HxCDF	155	0.216	1	0.1	15.5
1,2,3,7,8,9-HxCDF	ND	0.289	1	0.1	
2,3,4,6,7,8-HxCDF	206	0.247	1	0.1	20.6
1,2,3,4,6,7,8-HpCDF	5450	155	500	0.01	54.5
1,2,3,4,7,8,9-HpCDF	573	11.1	1	0.01	5.73
OCDF	57800	377	500	0.0003	17.3

Total TEQ 667

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Dilution
Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g
Data File Name: P106300
ICAL Date: 09/11/09
Date Analyzed: 12/2/09 2304
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	141	650			500
1,2,3,7,8-PeCDD	ND U	88.8	1620			500
1,2,3,4,7,8-HxCDD	ND U	101	1620			500
1,2,3,6,7,8-HxCDD	526 J	91.3	1620	1.25	1.000	500
1,2,3,7,8,9-HxCDD	378 JK	96.6	1620	1.04	1.008	500
1,2,3,4,6,7,8-HpCDD	18700 B	245	1620	1.00	1.000	500
OCDD	255000 B	285	3250	0.88	1.000	500
2,3,7,8-TCDF	ND U	127	650			500
1,2,3,7,8-PeCDF	ND U	96.4	1620			500
2,3,4,7,8-PeCDF	ND U	95.5	1620			500
1,2,3,4,7,8-HxCDF	ND U	119	1620			500
1,2,3,6,7,8-HxCDF	ND U	113	1620			500
1,2,3,7,8,9-HxCDF	ND U	152	1620			500
2,3,4,6,7,8-HxCDF	ND U	130	1620			500
1,2,3,4,6,7,8-HpCDF	5450 B	155	1620	1.14	1.000	500
1,2,3,4,7,8,9-HpCDF	ND U	216	1620			500
OCDF	57800 B	377	3250	0.91	1.004	500

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g

Data File Name: P106300
ICAL Date: 09/11/09

Date Analyzed: 12/2/09 2304
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106292

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1320	1056.989	80		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1300	1061.524	82		40-135	1.59	1.180
13C-1,2,3,6,7,8-HxCDD	3680	2693.254	73		40-135	1.29	0.992
13C-1,2,3,4,6,7,8-HpCDD	4100	3079.937	75		40-135	1.06	1.068
13C-OCDD	14300	5487.731	38	Y	40-135	0.88	1.146
13C-2,3,7,8-TCDF	1280	1125.550	88		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1370	1167.324	85		40-135	1.58	1.140
13C-1,2,3,4,7,8-HxCDF	3420	2850.027	83		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	4030	3278.754	81		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	1.154	72		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-31-110609
Lab Code: R0906411-033
Run Type: Reanalysis

Service Request: R0906411
Date Collected: 11/6/09 1308
Date Received: 11/7/09

Units: ng/Kg
Basis: Dry
Percent Solids: 75.5

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.194g

Data File Name: P205038
ICAL Date: 03/16/09

Date Analyzed: 11/18/09 0248
Date Extracted: 11/11/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205027
Cal Ver. File Name: P205024

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	41.0	0.256	1.30	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	822.218	82		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	736.727	92		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: U133882
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2147
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	28.1	0.0299	1.25	0.77	1.001	1
1,2,3,7,8-PeCDD	55.4	0.159	3.13	1.59	1.000	1
1,2,3,4,7,8-HxCDD	96.6	0.516	3.13	1.18	0.998	1
1,2,3,6,7,8-HxCDD	451	0.459	3.13	1.17	1.000	1
1,2,3,7,8,9-HxCDD	302	0.484	3.13	1.17	1.008	1
1,2,3,4,6,7,8-HpCDD	14100 E	9.98	3.13	0.99	1.000	1
OCDD	103000 BE	0.275	6.26	0.97	1.000	1
2,3,7,8-TCDF	53.5 C	0.0713	1.25	0.82	1.001	1
1,2,3,7,8-PeCDF	23.3	0.549	3.13	1.73	1.001	1
2,3,4,7,8-PeCDF	32.3	0.512	3.13	1.66	1.024	1
1,2,3,4,7,8-HxCDF	176	0.480	3.13	1.33	1.000	1
1,2,3,6,7,8-HxCDF	79.4	0.467	3.13	1.28	1.003	1
1,2,3,7,8,9-HxCDF	1.74 J	0.599	3.13	1.13	1.037	1
2,3,4,6,7,8-HxCDF	110	0.519	3.13	1.32	1.016	1
1,2,3,4,6,7,8-HpCDF	3740 E	12.2	3.13	1.12	1.000	1
1,2,3,4,7,8,9-HpCDF	235	15.7	3.13	1.13	1.035	1
OCDF	36800 EP	0.214	6.26	0.91	1.004	1
Total Tetra-Dioxins	210	0.0299	1.25	0.79		1
Total Penta-Dioxins	279	0.159	3.13	1.60		1
Total Hexa-Dioxins	2890	0.459	3.13	1.18		1
Total Hepta-Dioxins	27000	9.98	3.13	0.99		1
Total Tetra-Furans	298	0.0713	1.25	0.83		1
Total Penta-Furans	635	0.512	3.13	1.64		1
Total Hexa-Furans	1690	0.467	3.13	1.31		1
Total Hepta-Furans	16900	12.2	3.13	1.12		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: U133882
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2147
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	717.118	72		40-135	0.75	1.008
13C-1,2,3,7,8-PeCDD	1000	545.678	55		40-135	1.36	1.171
13C-1,2,3,6,7,8-HxCDD	2500	1568.315	63		40-135	1.09	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1334.453	53		40-135	1.01	1.069
13C-OCDD	5000	1528.237	31	Y	40-135	0.81	1.152
13C-2,3,7,8-TCDF	1000	742.285	74		40-135	0.68	0.978
13C-1,2,3,7,8-PeCDF	1000	650.105	65		40-135	1.37	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1654.911	66		40-135	0.46	0.972
13C-1,2,3,4,6,7,8-HpCDF	2500	1280.593	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	584.360	73		40-135	NA	1.009

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	28.1	0.0299	1	1	28.1
1,2,3,7,8-PeCDD	55.4	0.159	1	1	55.4
1,2,3,4,7,8-HxCDD	96.6	0.516	1	0.1	9.66
1,2,3,6,7,8-HxCDD	451	0.459	1	0.1	45.1
1,2,3,7,8,9-HxCDD	302	0.484	1	0.1	30.2
1,2,3,4,6,7,8-HpCDD	17400	26.1	50	0.01	174
OCDD	317000	6.99	50	0.0003	95.1
2,3,7,8-TCDF	20.8	0.191	1	0.1	2.08
1,2,3,7,8-PeCDF	23.3	0.549	1	0.03	0.699
2,3,4,7,8-PeCDF	32.3	0.512	1	0.3	9.69
1,2,3,4,7,8-HxCDF	176	0.480	1	0.1	17.6
1,2,3,6,7,8-HxCDF	79.4	0.467	1	0.1	7.94
1,2,3,7,8,9-HxCDF	1.74	0.599	1	0.1	0.174
2,3,4,6,7,8-HxCDF	110	0.519	1	0.1	11.0
1,2,3,4,6,7,8-HpCDF	4620	21.1	50	0.01	46.2
1,2,3,4,7,8,9-HpCDF	235	15.7	1	0.01	2.35
OCDF	45400	6.02	50	0.0003	13.6

Total TEQ 549

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g

Data File Name: P205131
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0008
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	1.07	62.6			50
1,2,3,7,8-PeCDD	80.8 J	4.55	157	1.63	1.000	50
1,2,3,4,7,8-HxCDD	113 J	9.45	157	1.15	0.998	50
1,2,3,6,7,8-HxCDD	591	8.37	157	1.24	1.000	50
1,2,3,7,8,9-HxCDD	381	9.10	157	1.20	1.008	50
1,2,3,4,6,7,8-HpCDD	17400	26.1	157	1.03	1.000	50
OCDD	317000 BE	6.99	313	0.90	1.000	50
2,3,7,8-TCDF	ND U	4.16	62.6			50
1,2,3,7,8-PeCDF	ND U	10.4	157			50
2,3,4,7,8-PeCDF	ND U	10.3	157			50
1,2,3,4,7,8-HxCDF	227	36.5	157	1.15	1.000	50
1,2,3,6,7,8-HxCDF	106 J	35.1	157	1.17	1.004	50
1,2,3,7,8,9-HxCDF	ND U	45.7	157			50
2,3,4,6,7,8-HxCDF	130 J	39.2	157	1.23	1.017	50
1,2,3,4,6,7,8-HpCDF	4620	21.1	157	1.01	1.000	50
1,2,3,4,7,8,9-HpCDF	316	28.8	157	1.04	1.034	50
OCDF	45400	6.02	313	0.86	1.004	50

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g

Data File Name: P205131
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0008
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1390	1071.539	77		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1820	1223.733	67		40-135	1.52	1.175
13C-1,2,3,6,7,8-HxCDD	3970	2375.348	60		40-135	1.22	0.992
13C-1,2,3,4,6,7,8-HpCDD	4720	3176.930	67		40-135	1.04	1.068
13C-OCDD	16100	6264.742	39	Y	40-135	0.89	1.147
13C-2,3,7,8-TCDF	1350	944.601	70		40-135	0.68	0.980
13C-1,2,3,7,8-PeCDF	1540	1132.583	74		40-135	1.52	1.135
13C-1,2,3,4,7,8-HxCDF	3790	2283.458	60		40-135	0.50	0.971
13C-1,2,3,4,6,7,8-HpCDF	4900	2805.030	57		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	14.071	88		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-32-110609
Lab Code: R0906411-034
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1335
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 79.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.020g
Data File Name: P205049
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1125
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	20.8	0.191	1.25	0.77	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	721.140	72		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	643.455	80		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1415
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-33-110609	Units:	ng/Kg
Lab Code:	R0906411-035	Basis:	Dry
		Percent Solids:	74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/18/09 2235
Prep Method:	Method	Date Extracted:	11/12/09
Sample Amount:	10.645g	Instrument Name:	E-HRMS-01
Data File Name:	U133883	GC Column:	DB-5
ICAL Date:	07/31/09	Blank File Name:	P106111
		Cal Ver. File Name:	U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	18.2	0.0432	1.27	0.77	1.001	1
1,2,3,7,8-PeCDD	22.1	0.112	3.17	1.65	1.000	1
1,2,3,4,7,8-HxCDD	39.1	0.273	3.17	1.32	0.998	1
1,2,3,6,7,8-HxCDD	110	0.243	3.17	1.12	1.000	1
1,2,3,7,8,9-HxCDD	114	0.256	3.17	1.16	1.008	1
1,2,3,4,6,7,8-HpCDD	4040 E	3.30	3.17	0.98	1.000	1
OCDD	43100 BE	0.416	6.34	0.90	1.000	1
2,3,7,8-TCDF	32.4 C	0.156	1.27	0.83	1.001	1
1,2,3,7,8-PeCDF	12.4	0.879	3.17	1.74	1.000	1
2,3,4,7,8-PeCDF	15.1	0.819	3.17	1.66	1.023	1
1,2,3,4,7,8-HxCDF	80.3	0.439	3.17	1.31	1.000	1
1,2,3,6,7,8-HxCDF	31.8	0.428	3.17	1.32	1.003	1
1,2,3,7,8,9-HxCDF	2.00 JP	0.549	3.17	1.25	1.037	1
2,3,4,6,7,8-HxCDF	41.0	0.475	3.17	1.33	1.017	1
1,2,3,4,6,7,8-HpCDF	1190 E	2.74	3.17	1.11	1.000	1
1,2,3,4,7,8,9-HpCDF	77.6	3.53	3.17	1.11	1.034	1
OCDF	8730 EP	0.140	6.34	0.90	1.004	1
Total Tetra-Dioxins	162	0.0432	1.27	0.78		1
Total Penta-Dioxins	232	0.112	3.17	1.46		1
Total Hexa-Dioxins	1060	0.243	3.17	1.19		1
Total Hepta-Dioxins	8480	3.30	3.17	0.99		1
Total Tetra-Furans	169	0.156	1.27	0.82		1
Total Penta-Furans	215	0.819	3.17	1.66		1
Total Hexa-Furans	923	0.428	3.17	1.29		1
Total Hepta-Furans	5240	2.74	3.17	1.11		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: Percent
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: U133883
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2235
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	710.472	71		40-135	0.74	1.008
13C-1,2,3,7,8-PeCDD	1000	578.633	58		40-135	1.35	1.172
13C-1,2,3,6,7,8-HxCDD	2500	1418.597	57		40-135	1.09	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1428.767	57		40-135	1.01	1.069
13C-OCDD	5000	2003.117	40		40-135	0.79	1.151
13C-2,3,7,8-TCDF	1000	756.738	76		40-135	0.67	0.979
13C-1,2,3,7,8-PeCDF	1000	686.536	69		40-135	1.35	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1645.656	66		40-135	0.46	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1282.967	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	578.819	72		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035

Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	18.2	0.0432	1	1	18.2
1,2,3,7,8-PeCDD	22.1	0.112	1	1	22.1
1,2,3,4,7,8-HxCDD	39.1	0.273	1	0.1	3.91
1,2,3,6,7,8-HxCDD	110	0.243	1	0.1	11.0
1,2,3,7,8,9-HxCDD	114	0.256	1	0.1	11.4
1,2,3,4,6,7,8-HpCDD	4510	7.79	10	0.01	45.1
OCDD	55400	0.926	10	0.0003	16.6
2,3,7,8-TCDF	14.0	0.186	1	0.1	1.40
1,2,3,7,8-PeCDF	12.4	0.879	1	0.03	0.372
2,3,4,7,8-PeCDF	15.1	0.819	1	0.3	4.53
1,2,3,4,7,8-HxCDF	80.3	0.439	1	0.1	8.03
1,2,3,6,7,8-HxCDF	31.8	0.428	1	0.1	3.18
1,2,3,7,8,9-HxCDF	2.00	0.549	1	0.1	0.200
2,3,4,6,7,8-HxCDF	41.0	0.475	1	0.1	4.10
1,2,3,4,6,7,8-HpCDF	1370	8.78	10	0.01	13.7
1,2,3,4,7,8,9-HpCDF	77.6	3.53	1	0.01	0.776
OCDF	9940	0.993	10	0.0003	2.98

Total TEQ 168

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Dilution
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: P205132
ICAL Date: 08/01/08
Date Analyzed: 11/26/09 0056
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	19.8	0.567	12.7	0.81	1.001	10
1,2,3,7,8-PeCDD	24.1 J	0.501	31.7	1.35	1.000	10
1,2,3,4,7,8-HxCDD	40.2	1.21	31.7	1.25	0.999	10
1,2,3,6,7,8-HxCDD	154	1.08	31.7	1.27	1.000	10
1,2,3,7,8,9-HxCDD	130	1.17	31.7	1.25	1.009	10
1,2,3,4,6,7,8-HpCDD	4510	7.79	31.7	1.04	1.000	10
OCDD	55400 BE	0.926	63.4	0.89	1.000	10
2,3,7,8-TCDF	17.3 CK	0.783	12.7	0.47	1.001	10
1,2,3,7,8-PeCDF	13.1 JK	1.74	31.7	1.84	1.001	10
2,3,4,7,8-PeCDF	11.4 JK	1.72	31.7	1.93	1.025	10
1,2,3,4,7,8-HxCDF	78.0	9.78	31.7	1.07	1.000	10
1,2,3,6,7,8-HxCDF	27.3 JK	9.39	31.7	1.01	1.004	10
1,2,3,7,8,9-HxCDF	ND U	12.3	31.7			10
2,3,4,6,7,8-HxCDF	33.5 K	10.5	31.7	1.02	1.018	10
1,2,3,4,6,7,8-HpCDF	1370	8.78	31.7	0.99	1.000	10
1,2,3,4,7,8,9-HpCDF	96.4	12.0	31.7	1.06	1.034	10
OCDF	9940	0.993	63.4	0.89	1.004	10

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil

Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Dilution

Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09

Units: Percent
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g

Data File Name: P205132
ICAL Date: 08/01/08

Date Analyzed: 11/26/09 0056
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P205122

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1410	1013.920	72		40-135	0.80	1.009
13C-1,2,3,7,8-PeCDD	1720	1168.036	68		40-135	1.55	1.174
13C-1,2,3,6,7,8-HxCDD	4390	2252.182	51		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	4390	2845.428	65		40-135	1.06	1.068
13C-OCDD	12500	5746.071	46		40-135	0.89	1.147
13C-2,3,7,8-TCDF	1320	957.013	73		40-135	0.75	0.979
13C-1,2,3,7,8-PeCDF	1450	1091.606	75		40-135	1.53	1.135
13C-1,2,3,4,7,8-HxCDF	3790	2163.421	57		40-135	0.51	0.970
13C-1,2,3,4,6,7,8-HpCDF	4900	2516.337	51		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	59.715	75		40-135	NA	1.010

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-33-110609
Lab Code: R0906411-035
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1415
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.1

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.645g
Data File Name: P205050
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1202
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	14.0	0.186	1.27	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	663.014	66		40-135	0.76	1.059
37Cl-2,3,7,8-TCDD	800	621.825	78		40-135	NA	0.986

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.505g
Data File Name: U133884
ICAL Date: 07/31/09
Date Analyzed: 11/18/09 2322
Date Extracted: 11/12/09
Instrument Name: E-HRMS-01
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: U133878

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	1.26 J	0.0404	1.27	0.68	1.001	1
1,2,3,7,8-PeCDD	3.24	0.0503	3.19	1.62	1.000	1
1,2,3,4,7,8-HxCDD	4.71	0.124	3.19	1.09	0.999	1
1,2,3,6,7,8-HxCDD	15.8	0.110	3.19	1.15	1.000	1
1,2,3,7,8,9-HxCDD	15.0	0.116	3.19	1.19	1.009	1
1,2,3,4,6,7,8-HpCDD	450	0.838	3.19	0.99	1.000	1
OCDD	4730 BE	0.209	6.37	0.89	1.000	1
2,3,7,8-TCDF	6.09 C	0.0319	1.27	0.85	1.002	1
1,2,3,7,8-PeCDF	3.43	0.177	3.19	1.70	1.000	1
2,3,4,7,8-PeCDF	3.23	0.165	3.19	1.59	1.023	1
1,2,3,4,7,8-HxCDF	17.2	0.887	3.19	1.29	1.000	1
1,2,3,6,7,8-HxCDF	8.07	0.864	3.19	1.33	1.003	1
1,2,3,7,8,9-HxCDF	ND U	1.11	3.19			1
2,3,4,6,7,8-HxCDF	7.51	0.960	3.19	1.42	1.017	1
1,2,3,4,6,7,8-HpCDF	168	0.500	3.19	1.11	1.000	1
1,2,3,4,7,8,9-HpCDF	18.9	0.643	3.19	1.12	1.034	1
OCDF	850	0.120	6.37	0.90	1.004	1
Total Tetra-Dioxins	36.9	0.0404	1.27	0.75		1
Total Penta-Dioxins	47.6	0.0503	3.19	1.38		1
Total Hexa-Dioxins	149	0.110	3.19	1.17		1
Total Hepta-Dioxins	928	0.838	3.19	0.99		1
Total Tetra-Furans	37.1	0.0319	1.27	0.78		1
Total Penta-Furans	56.6	0.165	3.19	1.62		1
Total Hexa-Furans	170	0.864	3.19	1.32		1
Total Hepta-Furans	612	0.500	3.19	1.11		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Weston Solutions, Incorporated	Service Request:	R0906411
Project:	Sauget-E. St. Louis Residential/20405.016.008.0828.00	Date Collected:	11/6/09 1455
Sample Matrix:	Soil	Date Received:	11/7/09
Sample Name:	SE-SS-34-110609	Units:	Percent
Lab Code:	R0906411-036	Basis:	Dry
		Percent Solids:	74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	Date Analyzed:	11/18/09 2322
Prep Method:	Method	Date Extracted:	11/12/09
Sample Amount:	10.505g	Instrument Name:	E-HRMS-01
Data File Name:	U133884	GC Column:	DB-5
ICAL Date:	07/31/09	Blank File Name:	P106111
		Cal Ver. File Name:	U133878

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	667.753	67		40-135	0.74	1.008
13C-1,2,3,7,8-PeCDD	1000	571.622	57		40-135	1.36	1.172
13C-1,2,3,6,7,8-HxCDD	2500	1464.508	59		40-135	1.10	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1454.339	58		40-135	0.99	1.069
13C-OCDD	5000	2225.433	45		40-135	0.79	1.151
13C-2,3,7,8-TCDF	1000	674.951	67		40-135	0.67	0.978
13C-1,2,3,7,8-PeCDF	1000	658.260	66		40-135	1.36	1.133
13C-1,2,3,4,7,8-HxCDF	2500	1654.670	66		40-135	0.46	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1263.410	51		40-135	0.39	1.045
37Cl-2,3,7,8-TCDD	800	546.687	68		40-135	NA	1.009

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	1.26	0.0404	1	1	1.26
1,2,3,7,8-PeCDD	3.24	0.0503	1	1	3.24
1,2,3,4,7,8-HxCDD	4.71	0.124	1	0.1	0.471
1,2,3,6,7,8-HxCDD	15.8	0.110	1	0.1	1.58
1,2,3,7,8,9-HxCDD	15.0	0.116	1	0.1	1.50
1,2,3,4,6,7,8-HpCDD	450	0.838	1	0.01	4.50
OCDD	4730	0.209	1	0.0003	1.42
2,3,7,8-TCDF	2.64	0.116	1	0.1	0.264
1,2,3,7,8-PeCDF	3.43	0.177	1	0.03	0.103
2,3,4,7,8-PeCDF	3.23	0.165	1	0.3	0.969
1,2,3,4,7,8-HxCDF	17.2	0.887	1	0.1	1.72
1,2,3,6,7,8-HxCDF	8.07	0.864	1	0.1	0.807
1,2,3,7,8,9-HxCDF	ND	1.11	1	0.1	
2,3,4,6,7,8-HxCDF	7.51	0.960	1	0.1	0.751
1,2,3,4,6,7,8-HpCDF	168	0.500	1	0.01	1.68
1,2,3,4,7,8,9-HpCDF	18.9	0.643	1	0.01	0.189
OCDF	850	0.120	1	0.0003	0.255

Total TEQ 20.7

2005 WHO TEFs, ND = 0

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: SE-SS-34-110609
Lab Code: R0906411-036
Run Type: Reanalysis
Service Request: R0906411
Date Collected: 11/6/09 1455
Date Received: 11/7/09
Units: ng/Kg
Basis: Dry
Percent Solids: 74.7

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.505g
Data File Name: P205051
ICAL Date: 03/16/09
Date Analyzed: 11/19/09 1238
Date Extracted: 11/12/09
Instrument Name: E-HRMS-04
GC Column: DB-225
Blank File Name: P205043
Cal Ver. File Name: P205042

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDF	2.64 K	0.116	1.27	0.93	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDF	1000	616.524	62		40-135	0.77	1.059
37Cl-2,3,7,8-TCDD	800	560.376	70		40-135	NA	0.985

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900466-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106031
ICAL Date: 09/11/09

Date Analyzed: 11/13/09 1917
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.149	1.00			1
1,2,3,7,8-PeCDD	ND U	0.138	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.124	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.112	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.119	2.50			1
1,2,3,4,6,7,8-HpCDD	ND U	0.158	2.50			1
OCDD	1.65 J	0.275	5.00	0.96	1.000	1
2,3,7,8-TCDF	ND U	0.126	1.00			1
1,2,3,7,8-PeCDF	ND U	0.155	2.50			1
2,3,4,7,8-PeCDF	ND U	0.154	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.0884	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.0844	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.114	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.0966	2.50			1
1,2,3,4,6,7,8-HpCDF	ND U	0.0833	2.50			1
1,2,3,4,7,8,9-HpCDF	ND U	0.116	2.50			1
OCDF	ND U	0.197	5.00			1
Total Tetra-Dioxins	ND U	0.149	1.00			1
Total Penta-Dioxins	ND U	0.138	2.50			1
Total Hexa-Dioxins	ND U	0.112	2.50			1
Total Hepta-Dioxins	ND U	0.158	2.50			1
Total Tetra-Furans	ND U	0.126	1.00			1
Total Penta-Furans	ND U	0.154	2.50			1
Total Hexa-Furans	ND U	0.0844	2.50			1
Total Hepta-Furans	ND U	0.0833	2.50			1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900466-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106031
ICAL Date: 09/11/09

Date Analyzed: 11/13/09 1917
Date Extracted: 11/10/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106031
Cal Ver. File Name: P106029

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	557.887	56		40-135	0.76	1.009
13C-1,2,3,7,8-PeCDD	1000	615.432	62		40-135	1.48	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1546.438	62		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1469.177	59		40-135	1.03	1.068
13C-OCDD	5000	2107.678	42		40-135	0.87	1.149
13C-2,3,7,8-TCDF	1000	539.221	54		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	627.800	63		40-135	1.58	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1578.684	63		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1485.390	59		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	494.782	62		40-135	NA	1.011

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauget-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900467-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106058
ICAL Date: 09/11/09

Date Analyzed: 11/16/09 1136
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106057

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.150	1.00			1
1,2,3,7,8-PeCDD	ND U	0.196	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.251	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.228	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.241	2.50			1
1,2,3,4,6,7,8-HpCDD	0.725 J	0.218	2.50	0.98	1.000	1
OCDD	2.90 J	0.434	5.00	0.98	1.000	1
2,3,7,8-TCDF	ND U	0.154	1.00			1
1,2,3,7,8-PeCDF	ND U	0.135	2.50			1
2,3,4,7,8-PeCDF	ND U	0.133	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.117	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.112	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.150	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.128	2.50			1
1,2,3,4,6,7,8-HpCDF	0.437 JK	0.156	2.50	1.24	1.000	1
1,2,3,4,7,8,9-HpCDF	ND U	0.217	2.50			1
OCDF	0.987 J	0.330	5.00	0.99	1.004	1
Total Tetra-Dioxins	ND U	0.150	1.00			1
Total Penta-Dioxins	ND U	0.196	2.50			1
Total Hexa-Dioxins	ND U	0.228	2.50			1
Total Hepta-Dioxins	0.725 J	0.218	2.50	0.98		1
Total Tetra-Furans	ND U	0.154	1.00			1
Total Penta-Furans	ND U	0.133	2.50			1
Total Hexa-Furans	ND U	0.112	2.50			1
Total Hepta-Furans	0.226 J	0.156	2.50	0.91		1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900467-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106058
ICAL Date: 09/11/09

Date Analyzed: 11/16/09 1136
Date Extracted: 11/11/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106058
Cal Ver. File Name: P106057

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	605.570	61		40-135	0.77	1.009
13C-1,2,3,7,8-PeCDD	1000	635.830	64		40-135	1.54	1.178
13C-1,2,3,6,7,8-HxCDD	2500	1720.254	69		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1557.316	62		40-135	1.03	1.068
13C-OCDD	5000	2168.173	43		40-135	0.90	1.148
13C-2,3,7,8-TCDF	1000	577.040	58		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	659.193	66		40-135	1.54	1.138
13C-1,2,3,4,7,8-HxCDF	2500	1740.661	70		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1571.593	63		40-135	0.44	1.045
37Cl-2,3,7,8-TCDD	800	574.975	72		40-135	NA	1.010

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900470-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Data File Name: P106111
ICAL Date: 09/11/09

Date Analyzed: 11/18/09 1315
Date Extracted: 11/12/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P106105

Analyte Name	Result Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND U	0.0908	1.00			1
1,2,3,7,8-PeCDD	ND U	0.0743	2.50			1
1,2,3,4,7,8-HxCDD	ND U	0.0563	2.50			1
1,2,3,6,7,8-HxCDD	ND U	0.0511	2.50			1
1,2,3,7,8,9-HxCDD	ND U	0.0540	2.50			1
1,2,3,4,6,7,8-HpCDD	ND U	0.0886	2.50			1
OCDD	0.418 JK	0.134	5.00	1.26	1.000	1
2,3,7,8-TCDF	ND U	0.119	1.00			1
1,2,3,7,8-PeCDF	ND U	0.0631	2.50			1
2,3,4,7,8-PeCDF	ND U	0.0624	2.50			1
1,2,3,4,7,8-HxCDF	ND U	0.0455	2.50			1
1,2,3,6,7,8-HxCDF	ND U	0.0435	2.50			1
1,2,3,7,8,9-HxCDF	ND U	0.0583	2.50			1
2,3,4,6,7,8-HxCDF	ND U	0.0498	2.50			1
1,2,3,4,6,7,8-HpCDF	ND U	0.0602	2.50			1
1,2,3,4,7,8,9-HpCDF	ND U	0.0838	2.50			1
OCDF	ND U	0.129	5.00			1
Total Tetra-Dioxins	ND U	0.0908	1.00			1
Total Penta-Dioxins	ND U	0.0743	2.50			1
Total Hexa-Dioxins	ND U	0.0511	2.50			1
Total Hepta-Dioxins	ND U	0.0886	2.50			1
Total Tetra-Furans	ND U	0.119	1.00			1
Total Penta-Furans	ND U	0.0624	2.50			1
Total Hexa-Furans	ND U	0.0435	2.50			1
Total Hepta-Furans	ND U	0.0602	2.50			1

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Weston Solutions, Incorporated
Project: Sauge-E. St. Louis Residential/20405.016.008.0828.00
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: EQ0900470-01

Service Request: R0906411
Date Collected: NA
Date Received: NA

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method
Sample Amount: 10.000g

Date Analyzed: 11/18/09 1315
Date Extracted: 11/12/09
Instrument Name: E-HRMS-03
GC Column: DB-5
Blank File Name: P106111
Cal Ver. File Name: P106105

Data File Name: P106111
ICAL Date: 09/11/09

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	695.819	70		40-135	0.78	1.009
13C-1,2,3,7,8-PeCDD	1000	733.246	73		40-135	1.57	1.179
13C-1,2,3,6,7,8-HxCDD	2500	1628.274	65		40-135	1.27	0.991
13C-1,2,3,4,6,7,8-HpCDD	2500	1642.854	66		40-135	1.05	1.069
13C-OCDD	5000	2524.997	50		40-135	0.89	1.149
13C-2,3,7,8-TCDF	1000	724.227	72		40-135	0.78	0.979
13C-1,2,3,7,8-PeCDF	1000	790.531	79		40-135	1.59	1.139
13C-1,2,3,4,7,8-HxCDF	2500	1639.645	66		40-135	0.52	0.970
13C-1,2,3,4,6,7,8-HpCDF	2500	1481.584	59		40-135	0.43	1.045
37Cl-2,3,7,8-TCDD	800	631.862	79		40-135	NA	1.010

Comments: _____